COMPREHENSIVE EVERGLADES RESTORATION PLAN–THE FIRST MAJOR PROJECTS

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BEFORE THE

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WATER RESOURCES AND ENVIRONMENT

OF THE

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TRANSPORTATION AND
INFRASTRUCTURE
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COMPREHENSIVE EVERGLADES RESTORATION PLAN—THE FIRST MAJOR PROJECTS

Thursday, July 22, 2004

HOUSE OF REPRESENTATIVES, COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT, WASHINGTON, D.C.

The subcommittee met, pursuant to call, at 2:00 p.m. in room 2167, Rayburn House Office Building, Hon. John J. Duncan, Jr. [chairman of the subcommittee] presiding.

Mr. DUNCAN. I want to welcome everyone to our hearing today.

I am going to have to slip out in just a minute and get to a mandatory vote in the Government Reform Committee, so I am going to place my full statement in the record.

This is a hearing on the Comprehensive Everglades Restoration Plan. The Water Resources Development Act of 2000 authorized the Comprehensive Everglades Restoration Plan to be the framework for conserving and redistributing water in south Florida. The principal goal of this effort is to restore water to the Everglades but at the same time recognizing the water supply needs of agricultural and urban areas.

I am going to turn at this time to the Ranking Member, Mr. Costello. I will place my full statement in the record and I will have additional comments when Mr. Foley arrives. I think he is on his way at this time.

Mr. COSTELLO. Mr. Chairman, I will place my statement in the record as well.

Let me just say as everyone knows, this subcommittee has investigated the decline of the Everglades for years. I was pleased that in WRDA 2000 that we defined a broadbased restoration plan for the Everglades. It is our responsibility now. We all know that this will be a long, ongoing project and will be very expensive and it is our responsibility as this subcommittee to monitor both the plan to see that it proceeds as intended and the resources are spent in a consistent manner with not only this committee but in the interest of the taxpayers as well.

I look forward to hearing from our colleague, Mr. Foley, and the other witnesses who will be testifying as well.

Mr. DUNCAN. I want to first welcome the first witness we have today, the Honorable Mark Foley, our good friend from Florida. The way we handle member panels here, we go ahead and let you give your statement. Your full statement will be placed in the record but in consideration of other witnesses and the fact that we do have a chance to question or to talk to you about these matters

on the floor at other times, we do not question the members in this subcommittee. We are glad to have you here with us.

I do have one problem in that I have a mandatory vote going on right at this moment and I am going to have to slip out. I will be back just as soon as I possibly can but you may proceed with your statement.

Mr. Foley?

TESTIMONY OF HON. MARK FOLEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. FOLEY. I have Lance Armstrong's bracelet. We obviously wish him well and I hope my marathon on helping to restore the Everglades is met with the same kind of success he has proven.

It is extraordinarily important, as Mr. Costello suggested. It is not only important to move forward with the entirety of the Everglades restoration but I want to put in context the fact that we are spending a considerable amount of taxpayers dollars and this is a critical link in that proposal. To not fully implement this proposal I think will lead to further degradation of our environmental quality of life in Florida, the sustainability of the Everglades and of course all the other projects that tie together.

When Congress passed the Comprehensive Everglades Restoration Plan, we reaffirmed the Nation's commitment to America's most imperiled national treasure. I underscore the nature of this project is that it is an American treasure. Sometimes people consider this a Florida project. This is like the Grand Canyon, this is like Yosemite, this is like any other wonderful, historic or great landscaping in our country. This is an ownership of the American people.

For almost 45 years, there has been a steady stream of clear and compelling, scientific data detailing the perilous state of the Everglades. Unnatural levels of fresh water in our estuaries, lesion on our fish, deposits of muck and phosphorous in our lakes and canals and the declining of wading birds. CERP represents a historic partnership between all stakeholders, agricultural interests, the Administration, Governor Bush, the utilities, Indian tribes and environmental groups came together in a rare form of both bipartisan and mutual cooperation in an unprecedented show of that cooperation to develop a plan that will protect and preserve our ecosystem.

It is built upon the initial commitment we as Congress made at my request to provide $200 million in Federal funds for Florida's Everglades restoration back in the 1996 Farm Bill. Mr. Chairman, I want to underscore, we are now at a crossroad in timing of this project. It is critical. The Indian River Lagoon Plan, South IRL is one of the first significant elements of CERP and it is responsible for critically addressing environmental abuses visited on the St. Lucie River, Indian River Lagoon, Lake Okeechobee by the old Central and Southern Florida Flood Control Project.

The Indian River Lagoon is a 156 mile long estuary located at the mouth of the St. Lucie River in Martin County which is part of my congressional district that I share with our colleague L.C. Hastings. It is home to more than 4,300 species of plants and animals and supports an annual economic contribution of more than $730 million. I can tell we have obviously important colleagues

from Martin County here to testify as well but I want to stress that they not only are involved from a strategic standpoint as representatives of local government, but they have also stepped up to the plate in voting by our constituents for a three year, one cent sales tax to contribute over $50 million in revenue for the IRL effort. This proves not only are we interested in asking the Federal Government for resources, my community has put its money where its mouth is and voted unusually if you will under these times when very few sales tax measures pass, the community recognized the life and sustainability of our communities rests solely on this area.

There are other things I will leave for the record because I want to give all parties a chance to speak but I want to once again underscore this is a most critical project in the bigger and larger scheme of what we are trying to create for all of the Everglades sustainability and restoration. I beg my colleagues, and I don't use that word often, if you would please carefully consider and look favorably on our request, it would be of enormous help to the communities, to the Everglades and to the sustainability of the quality of life of our entire State.

Mr. DUNCAN. Mark, thank you very much and I apologize to you once again. I know you have been extremely interested for quite some time now and it is a honor and privilege to have you here with us.

We will let you go so we can go ahead and get started with our regular witnesses. Do you have any questions or comments, Mr. Costello?

Mr. COSTELLO. No, other than to thank Mr. Foley for not only his testimony but his leadership on this issue. We, as well, are hopeful that it needs to occur this year. We firmly believe that. As you know, we passed the WRDA bill last September and we are waiting on the other body to act. Hopefully if they can take some action and get out a bill this year, we can get it to conference and address the issue.

Thank you.

Mr. DUNCAN. Thank you very much.

We will call our witnesses at this time. We have a very distinguished panel of witnesses. We have representing the Army Corps of Engineers, Colonel Robert M. Carpenter, Commander, Jacksonville District from Jacksonville, Florida; representing the Florida Department of Environmental Protection, Mr. Ernest Barnett, Director of Ecosystem Projects from Tallahassee, Florida; representing the Martin County Board of County Commissioners, Mr. Doug Smith, the Chairman of that commission from Stuart, Florida; representing Audubon of Florida, Ms. April H. Gromnicki, Everglades Policy Coordinator from Miami; and representing the Independent Scientific Review Panel for the Indian River Lagoon-South Project, Mr. John J. Burns, Chairman of that panel from Springfield, Virginia. We are honored and pleased to have each of you here with us.

We always proceed in the order the witnesses are listed on the call of the hearing and we will proceed in that manner. Your full statements will be placed in the record. All the committees and subcommittees of the Congress give witnesses five minutes to give their statements. In this subcommittee, we give six minutes but we

ask that when you see this, that you stop in consideration for the other witnesses who are here.

Before we do start, I notice our colleague, Mario Diaz-Balart has come in. Congressman Diaz-Balart has been very involved and active in this both in the State Legislature in Florida and here in the Congress. I am going to call on him for any statement or comments he wishes to make at this time before we start with the witnesses.

Mr. DIAZ-BALART. Thank you.

Let me first thank you, Chairman Duncan, for your leadership, by the way, historically on Everglades issues. Your commitment to the Everglades is very well known. I happen to represent the Everglades so let me thank you publicly.

These two projects that we are dealing with now are close to $1.5 billion. It is real money, so I want to thank you, Mr. Chairman, for reviewing this. I think it would be irresponsible of us to not review how the money is being spent, to make sure the money is well spent, to ensure they are properly planned, that they are well managed and obviously appropriately funded.

Indian River Lagoon, as we know much of the lagoon's floor has created a complicating effect on the health of waters bottom going species and I am glad we are going to have an opportunity to talk about that as well as southern Golden Gate Estates which while protecting estuaries from excessive fresh water discharges, this project will help restore water to the Everglades. In my opinion, these projects are necessary to accomplish their intended goals.

None of the results we all want are just going to happen naturally, unfortunately. So we must ensure that we are prioritizing correctly. We want to make sure the money that is being spent is going to projects that work, making sure the money is achieving the results we want and we are spending the money in a way this is consistent with the project's intent.

Again, I want to thank you for your support of the Everglades and secondly, for your support of the taxpayer and making sure the money is well spent and that it does achieve the results that we are all hoping for. Thank you, I am really looking forward to this hearing.

Mr. DUNCAN. Thank you very much. You are correct that the Indian River Lagoon Project is estimated at $1.2 billion and the Gold Gates Project is estimated at $363 million according to the information I have been given. That does amount to a lot of money and we have to see how it fits within our other priorities across the Nation but these are very, very important projects and this hearing is a followup to hearings that we have been doing on other important work by the Army Corps and so forth across the country, on the Upper Mississippi and the Louisiana Coastal Area and various other major type projects, but certainly the Everglades work is among the most important this Nation has to deal with at this time.

We will go ahead and start with the statements of the witnesses. Colonel Carpenter, you are first.

TESTIMONY OF COLONEL ROBERT M. CARPENTER, COMMANDER, JACKSONVILLE DISTRICT, U.S. ARMY CORPS OF ENGINEERS; ERNEST BARNETT, DIRECTOR, ECOSYSTEM PROJECTS, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION; DOUG SMITH, CHAIRMAN, MARTIN COUNTY BOARD OF COUNTY COMMISSIONERS; APRIL H. GROMNICKI, EVERGLADES POLICY COORDINATOR, AUDUBON OF FLORIDA; AND JOHN J. BURNS, CHAIRMAN, INDEPENDENT SCIENTIFIC REVIEW PANEL INDIAN RIVER LAGOON-SOUTH PROJECT

Colonel CARPENTER. Thank you, Mr. Chairman and members of the committee.

I am Colonel Robert M. Carpenter, Commander of the Jacksonville District, U.S. Army Corps of Engineers. I am pleased to have the opportunity today to speak to you about two projects, the Indian River Lagoon-South Project and the Southern Golden Estates Project which is now in draft implementation report form.

First, the Indian River Lagoon or IRL. The lagoon is an estuary of national significance and is a critically important feature in the Comprehensive Everglades Restoration Plan. The IRL Project is the culmination of an unprecedented partnership between the Corps of Engineers, South Florida Water Management District, the State of Florida and many State, Federal and local governments. This project has tremendous support from local and scientific communities. My testimony today will provide information about the features of the recommended plan, the project costs and benefits and authorization requirements.

As you know, my report is currently under final policy review at Corps headquarters. The recommendations of the Chief of Engineers will be forwarded to the Assistant Secretary of the Army for Civil Works by July 30th of this year. The draft recommended plan is the National Ecosystem Restoration Plan. The Indian River Lagoon, St. Lucie River and St. Lucie Estuary are just like the Everglades and Lake Okeechobee are, natural systems in distress. They suffer from water levels that fluctuate dramatically as they receive huge volumes of fresh water during the storm season and too little fresh water in times of drought. The IRL Project provides a unique opportunity to correct this distress. This project will actually increase the spacial extent of the wetlands and the upland mosaic to recreate areas that characterize the historic Everglades.

The primary features of the project include 12,600 acres of reservoirs capable of storing approximately 130,000 acre feet of water, 8,700 acres of stormwater treatment areas, 9,200 acres of restored uplands and wetlands providing approximately 30,000 acre feet of storage of water and water quality improvements, 3,100 acres of restored flood plain on the north fork of the St. Lucie River and additionally, 7.9 million cubic yards of muck will be removed from the St. Lucie River in the middle estuary.

This project will restore the St. Lucie River, its estuary and the Southern Indian River Lagoon The restoration will be demonstrated by important indicators of the health of the ecosystem. Throughout the lagoon we will see improvements in the oyster habitat, submerged aquatic vegetation and habitat. This will result in the preservation and protection of a huge area of wetlands.

Above and beyond the restoration of hydrology to the historic wetlands, the project will also increase the spacial extent of wetlands in the study area.

After explaining the technical benefits of the IRL Project, I would like to describe them in more holistic terms or in terms of what those benefits translate into for our society. The IRL recommended plan does three things. First, by capturing the water now lost at tide, the plan increases water supply. Second, even as the plan holds this water back in the environment, current levels of flood protections are maintained. We have ensured that reduced stormwater runoff does not increase flooding. Finally, I know you have heard the saying the environment is the economy and the economy is the environment. There are probably few places in the Nation where this is more true. Therefore, restoring the health of the St. Lucie and Indian River not only protects the regional economy but actually increases the economic opportunities.

Scientists and engineers have determined the substantial restoration will occur in the study area from the IRL Project with or without other CERP projects. The team has estimated that 88 percent of the estuary benefits and 100 percent of the watershed benefits will be achieved in the absence of construction of other CERP projects.

I would like to speak for a moment about the cost of the plan. You will not see traditional benefit cost ratios associated with this project because it is an environmental restoration project and traditional economic values are not assigned to benefits that come from these plans. However, the scale of the recommended plan features were selected based on cost effectiveness and incremental cost analysis.

The cost of our draft recommendation is based on October 2003 price levels and is estimated at $1.2 billion including $699 million for real estate. In accordance with the cost sharing requirements of Section 601(e) of the WRDA 2000 bill, the cost of the project including annual operations and monitoring activities will be shared equally between the Federal Government and non-Federal sponsors. WRDA 2000 specifically authorized the C-44 Basin storage reservoir component of this project. However, adapted management assessment of the needs of the C-44 Basin during the completion of this report for the Indian River Lagoon has resulted in substantial changes to this component of the plan. The other components of the recommended plan for IRL namely C-23, 24 and 25 components were included in the original Comprehensive Everglades Restoration Plan and do require specific authorization in accordance with Section 601(d). The natural storage area and muck removal components are new features that significantly enhance the overall performance of the project and also require specific authorization.

I have also recommended deauthorization of several projects totaling over $400 million. These include the C-44 reservoir, storage reservoir at an updated cost of $131 million and several Martin County irrigation and flood control projects dating back from the Flood Control Act of 1968.

Maintaining and restoring one of the most unique and diverse ecosystems in the world is a daunting challenge in and of itself. With the fragile ecosystem located adjacent to the diverse and

thriving human population, the complexity and challenges compounded exponentially.

Regarding the draft PIR for the restoration project, this project is another effort we are conducting in partnership with the South Florida Water Management District and many other groups. This project will bring great ecological benefits to the Big Cypress Swamp and the Fakahatchee Strand. The draft plan consists of restoring 55,000 acres of wetlands at an estimated cost of $363 million. The Jacksonville District has completed a draft project implementation report that includes our tentative proposal for restoration. The public comment period closed last week and our staff is now processing and analyzing the comments before the draft final report is completed.

The Army recognizes the longer it takes before corrective action is taken, the more difficult it will be to reverse the degradation. Both IRL and Picayune Strand are solid foundations for future actions. The flexibility that is built into these two plans as well as the Comprehensive Everglades Plan in total enables us to meet any unforeseen challenges. With this flexibility, we have one of the most important tools we need to incorporate the latest scientific advances into the program.

The coalition supporting each of these efforts are talented, resourceful and determined to succeed. With a commitment to the long journey ahead and full recognition of the resources that will be required, we will be successful.

Mr. Chairman, this concludes my statement. I stand ready to answer questions.

Mr. DUNCAN. Thank you very much, Colonel Carpenter.

Mr. Barnett?

Mr. BARNETT. We are pleased and honored to be here today. I am also pleased to report that more progress has been made towards Everglades restoration since the passage of WRDA 2000 than occurred in the previous decade. We are now beginning with our Federal partners to see measurable and tangible results.

We have already acquired, along with our Federal partners, over half of the land needed to implement the entire Comprehensive Everglades Restoration Plan and last year, we also broke ground on the first construction project of this massive restoration effort years ahead of schedule. We began restoring a more natural flow of water to more than 50,000 acres of wetlands in southwest Florida. Also since 2000, the State of Florida has invested over $915 million to implement the Comprehensive Everglades Restoration Plan and we have made a commitment to also invest another $1.7 billion to the end of the decade to implement the Comprehensive Everglades Restoration Plan and restore America's Everglades.

The secret to our success has been simple. It is working with our Federal partners, with our local communities, the environmental groups and others and staying focused on first rate science, engineering and management. We feel it is a proven formula that will allow success in these two projects you are considering, the Southern Golden Gate and Indian River Lagoon South Projects.

In regards to the Indian River Lagoon-South, the State of Florida is in strong support and endorsement of its inclusion in the Water Resources Development Act of 2000. The Indian River Lagoon is

recognized as an estuary of national significance and it is also a Florida aquatic preserve and outstanding Florida water.

The U.S. Army Corps of Engineers and the South Florida Water Management District's plan to restore this critical part of the south Florida ecosystem will restore more than 53,000 acres of wetlands, reduce pollution, and provide water storage to return a more natural flow of fresh water to the St. Lucie and Indian River Estuaries. The success of this plan is dependent upon its many contributors, the U.S. Army Corps of Engineers and the South Florida Water Management District who play key roles, the skilled and tenacious support of Martin and St. Lucie Counties and important contributions from many other agencies as well as the environmental community and groups such as Audubon make this plan a stellar example of environmental restoration.

Finally, the plan received its most valued support from the citizens of Martin and St. Lucie County especially through organizations such as the St. Lucie River Initiative, the Conservation Alliances of Martin and St. Lucie Counties, the River Coalition and the Indian River Citrus League.

We are pleased with Congress' actions to date and urge your continued support for this very, very important part of Everglades restoration.

In regards to Picayune Strand, Southern Golden Gate Estates hydrological restoration, the State is also in strong support of its inclusion in the Water Resources Development Act of 2004. This plan will restore over 36,000 acres of wetland habitat and the western part of the Everglades ecosystem. Restoring the hydrology will restore vegetative communities, wildlife populations, including listed species as well as improve the downstream estuary conditions to a more historic and less degraded state. This plan will also aid in protecting the City of Naples' eastern Golden Gate Well Field by improving groundwater recharge.

In an effort to expedite the restoration of critical western lands and implementation of the Comprehensive Everglades Restoration Plan, the State of Florida is actually moving ahead with the backfilling of a portion of this project, the Prairie Canal in Southern Golden Gate. The Prairie Canal Project involves backfilling seven miles of the canals, removing most roads adjacent to the canal and clearing exotic plant species from canal banks. This early start project is already reducing fresh water drainage from Fakahatchee Strand and it is replenishing valuable water supplies and restoring habitat for wildlife and will be completed by October 2005. This is the first construction started as part of the Comprehensive Everglades Restoration Plan.

Several Federal trust resources will benefit from the overall restoration of Southern Gold Gate including the 10,000 Islands National Wildlife Refuge, the Panhandle of Everglades National Park, and the Florida Panther National Wildlife Refuge, all will see environmental benefits from the completion of this important restoration project.

In summary, the State of Florida strongly supports the authorization and the recommended plans for both the Indian River Lagoon and Southern Golden Gate Hydrologic Restoration Project. We look forward to our continued partnership with the Federal Gov-

ernment. The Comprehensive Everglades Restoration Plan is a broad solution for ecosystem restoration and complementary water supply and flood control.

Florida has forged a complete and equal partnership with the Federal Government to protect our Nation's interests by restoring the Everglades and we believe the next step in this long term partnership is implementation of the Indian River Lagoon-South and Picayune Strands Southern Golden Gate Hydrologic Restoration Projects.

We are most appreciative of Congress' support and look forward to years ahead of working toward restoring America's Everglades.

Mr. DUNCAN. Thank you very much, Mr. Barnett.

Mr. Smith?

Mr. SMITH. Mr. Chairman and members of the subcommittee, it is my honor to express Martin County's strong support for the authorization of the Indian River Lagoon Project, Southern Golden Gate Project this year.

With me today is Vice Chairman of our board, Sarah Heard, Commissioner; Commissioner Michael DiTerlizzi and Water Quality Chief, Gary Roderick. We appreciate the strong support of our Florida delegation, especially Representatives Mark Foley, Mario Diaz-Balart, LC. Hastings and Senators Bob Graham and Bill Nelson.

Martin County's livelihood depends on the health of our waterways and the species that dwell there. Stuart, our county seat, is the shellfish capital of the world. Tourists and sports fishing contribute over $730 million annually to our economy and some 7,000 jobs and the health of our sensitive waterways.

We live in the most biologically diverse ecosystem in North America. However, man's efforts to drain the Everglades long ago threatened to destroy this great environmental treasure. Historically, the natural overflow of Lake Okeechobee supplied flow of fresh water all the way to Florida Bay. Today that chief flow does not exist. Instead, excess lake water is released through manmade canals to the east and west into extremely sensitive estuaries. In our case, vast amounts of polluted fresh water loaded with huge amounts of muck surge into C-44 canal through the St. Lucie River, St. Lucie Estuary and into the Indian River Lagoon. These fresh water surges upset the natural saline balance rendering fish and mammals susceptible to ulcers, tumors and lesions. Some 33 percent of dolphins, 55 percent of sea turtles in the estuary are inflicted with these maladies. Some species of fish no longer breed in the estuary.

These water surges do great damage to our economy. Last September some 1,000 citizens gathered near a rampaging brown water in support of IRL, demanding to stop this assault on the environment of our economy. IRL has the unified support of every county in south Florida, agricultural interests, environmental groups, business groups, and recreational interests. IRL will provide the needed surface storage water treatment areas, wetland habitat restoration and muck removal. It will stop the destructive discharges of dirty water into our sensitive estuaries, protect wildlife and supply cleansed fresh water for the Everglades ecosystem and agricultural use.

After the President's Earth Day announcement of this bold initiative to restore some 3 million acres of wetlands, the county wrote him to applaud his support of wetlands restoration. We noted that the IRL project alone will restore over 90,000 acres of wetlands. We also asked the President to support congressional authorization for the Indian River Lagoon South Program this year.

Mr. Chairman, we are not asking for a handout. Indeed, we have invested our own money in this project. In 1998, the citizens of Martin County enacted a three year one cent sales tax to generate our own Indian River contribution. We raised over $50 million and to date we have spent some $26 million to purchase land for that project.

Indian River Lagoon is part of our lives. We have participated every step of the way in its development by serving our communities, attending countless meetings, generating support from virtually every stakeholder in our area. We live in an area flush with the wonders of the Everglades ecosystem, we feel it is our solemn duty to preserve this marvelous asset for future generations to come. Now we ask you to take this first step by authorizing the Indian River Lagoon Project this year.

The Comprehensive Everglades Restoration Plan offers great promise for restoring this magnificent Everglades for all of America. It will be a long journey to achieve this great promise but this journey as worthy as it is cannot begin without taken the first step.

On behalf of Martin County and the Board of County Commissioners and the residents of Martin County, I sincerely appreciate your time and energy.

Thank you.

Mr. DUNCAN. Thank you very much, Mr. Smith. I do think it is good that the local citizens are participating in this to that extent.

Ms. Gromnicki?

Ms. GROMNICKI. Thank you for this opportunity to express our views on the Everglades Restoration Plan, particularly authorization of the Indian River Lagoon South Project and the Southern Golden Estates now known as Picayune Strand Ecosystem Restoration Project.

We want to particularly recognize Congressman Mario Diaz-Balart for his commitment and leadership as well as the rest of the Florida delegation and think that merits attention.

Clearly we support authorization of both CERP projects, recognizing that they are essential to meeting the congressional directive to restore the Everglades, protecting and preserving the south Florida ecosystem in the process. We recognize three things, that the measured success of Everglades restoration will be returning abundant wildlife to the ecosystem; that the economic prosperity and quality of life for citizens in south Florida are dependent upon a healthy Everglades ecosystem; and that the partnership between the State of Florida, the Federal Government, the local governments and stakeholders in the process is essential to success of the restoration plan.

Audubon recognizes that the principal measure of success for south Florida Everglades ecosystem restoration will be the return of abundant bird life. Over the decades we have seen a reduction of 90 percent in the birds lost from the ecosystem, the wading birds

lost from the ecosystem. By undoing the damage done from development and drainage, we can return the wildlife to the ecosystem. Like other components of the Comprehensive Everglades Restoration Plan, these projects are largely an attempt to repair the damage that has been done by previous Federal and State projects with the unintended consequences of unsustainable water management.

Of particular note in the Indian River Lagoon Project is the natural storage areas. These are a uniquely low tech option for storing water, cleaning water and in the process, providing habitat for the wildlife in the area. The long term cost savings for operation and management of this low tech option are significant.

The Greater Miami Chamber of Commerce, Chamber South and other chambers of commerce in southern Florida have recognized the importance of restoration to the economy and the quality of life and have ranked it one of the chambers' priorities for several years.

We see the Everglades as a model for future ecosystem restoration projects, a 50-50 partnership between the Federal Government and the partnering States. This is the ideal way to correct the unforeseen consequences of decades old Army Corps of Engineers projects to repair the ecosystems as equal partners with the States. Additionally, this restoration project, these two particular projects, are a race against development. Every day that these projects are delayed lands and options for restoration are lost to development. We need to move forward now if we are to be successful in the long run.

Indian River Lagoon and Picayune Strand and Southern Golden Gate Estates are vital components of the comprehensive plan. Local support is strong for both projects, every county in the State had supported both Indian River Lagoon as mentioned by Chairman Smith as well as the Southern Golden Gate Estates Project.

To conclude, we urge Congress to move forward with an authorization of both Indian River Lagoon and Southern Golden Gate Estates this year, to move restoration toward success in the face of encroaching urban development and pending estuarine collapse, and to fulfill the congressional promise of Everglades restoration.

Thank you.

Mr. DUNCAN. Thank you very much, Ms. Gromnicki.

Mr. Burns?

Mr. BURNS. Thank you for inviting me here this afternoon to discuss the work of the Independent Scientific Review Panel for the Indian River Lagoon-South Project implementation report and environmental impact statement.

I served on the committee along with my fellow committee members, Dr. Steven Bartell from the Cadmus Group in Maryville, Tennessee; Dr. Darrell Fontane from Colorado State University; Dr. William McAnally from Mississippi State University; Dr. Louis Motz from the University of Florida; and Dr. Robert Twilley from Louisiana State University.

Today, I would like to summarize for you the process the panel went through, our findings and the recommendations we made to the project delivery team and conclude with a brief summary statement.

The panel was commissioned by the Corps earlier this year. We began our work on March 6 when we received a copy of the final

report from the Corps. Each member of the panel individually reviewed the document, developed comments, provided those to the Corps and to each of the other panel members. That process took about two weeks. Following that, we met with the project delivery team in Jacksonville, Florida on March 30. At that meeting we received a briefing from the project delivery team on the project but the bulk of the meeting was spent discussing the comments and the responses the project delivery team had developed.

Following that meeting, we developed a draft report sent to the Corps by the 15th of April, the Corps then with input from the project delivery team provided us with additional comments and we finalized our activities on May 4.

In the way of findings, we were impressed by the document, its comprehensiveness and its attention to detail. It addressed a substantial number of issues with an obvious concern for public goals and for legislative directives. We were impressed by the project delivery team, truly an interagency, intergovernmental team. We commend the team members for their efforts in completing this dramatic task.

We concluded that the plans presented in the report have a high likelihood of meeting the restoration objectives and the supporting technical analyses were based on sound science. There are, however, considerable uncertainties inherent in any project of this complexity. Therefore the panel made recommendations to the project delivery team for additional analyses to be conducted as the project moves towards implementation.

I would summarize those in two areas, modeling and the other area I want to talk about is adaptive management. In the area of modeling, we would recommend additional effort in the following areas, modeling in climate and sea level rise, the operation and definition of the reservoirs, additional modeling in that area, more comprehensive, ecological models to forecast the likely outcomes of proposed restoration actions on Indian River Lagoon, sediment transportation and deposition modeling, review of the reliability of the groundwater flow model that is being used and use of a proven, three dimensional and numerical water quality model and more comprehensive modeling to address the impact of harvesting and grazing on the effectiveness of the subaquatic vegetation and oyster restoration initiatives that are part of the project.

In summary, the restoration of Indian River Lagoon in the view of the panel is a complex undertaking. We feel the project delivery team has done a first rate, professional job in the planning stage of the project. There are, however, considerable uncertainties ahead. Therefore the panel has recommended additional detailed analysis to be conducted during additional phases of the project.

That concludes my remarks. Thank you.

Mr. DUNCAN. Thank you very much, Mr. Burns. I thank all the witnesses for outstanding testimony.

Colonel Carpenter, I am going to go to Mr. Diaz-Balart for first questions but let me just ask you this. There are more than 60 component parts in this Comprehensive Everglades Restoration Plan, why this project first? I am told by the staff that this project does not directly benefit the Everglades and that it could even delay some other parts of the Plan that are more beneficial to the

Everglades. Is that correct? Why did you choose to go with this one first instead of one of all the others?

Colonel CARPENTER. There are several reasons why we chose Indian River Lagoon South to be the first. As you look at the heart of the system, Lake Okeechobee and the system in general, our most pressing need was water storage, so as we looked through this and our abilities to get the water right, we are looking for water storage first. We had to have someplace to put this excess water as the initial thing, so that became a major search. Indian River Lagood South Project provides 195,000 acre feet of storage, it clearly became a key thing for us to look to.

We also looked at trying to get the most benefit for the buck early in the program to get success. We looked at this project as largely independent but as a large watershed that we could actually with reasonable certainty be able to produce results. We have science that is going on and studies in the other areas, this one was in a position where we could move it ahead. It has unprecedented support which has made the job of building the coalition and the team much easier but the crux of the matter is that we are able to capture the water needed for restoration up front.

Mr. DUNCAN. I am going to have some additional questions but I am going to go to Mr. Diaz-Balart since he is the most directly involved member on this operation.

Mr. DIAZ-BALART. I have a lot of questions and I will try to get to them in the time allocated.

I want to first thank the panel. Mr. Barnett, it is good to see you again.

Mr. Chairman, as you have seen, the Everglades restoration is something supported by the entire State of Florida. It is not a partisan issue and those of us in south Florida have maybe a little better understanding of the Everglades than others but it is universally supported by everybody.

Mr. Barnett, I want to thank you again for the State's incredible efforts and involvement in putting taxpayers' money where collectively the State's mouth has been as well as local governments who have done the same thing throughout the State of Florida.

Ms. Gromnicki, you mentioned something I thought was key which is it is a fight against time. It is one of the fastest growing States and one of the fastest growing areas in the State. Again, it is a kind of fight, it is not like we are going to sit around and 30 years from now that land will still be there. It won't, it will disappear, it will be developed.

I have a question I guess to you, Colonel. You have been wonderful to work with and I appreciate that as well. My staff harasses your staff all the time. How important are both these projects to the overall restoration efforts of the Everglades?

Colonel CARPENTER. They are pivotal to the success. Getting an early start where we can restore and capture the water sets us up for all 68 projects which are interconnected. It is one ecosystem from north of the Lake all the way down to the Keys. So it is very important that we capture in project sized bites things we can handle with the science and with our funding stream in a way that makes sense. So we have picked the projects to do that. These first ones are absolutely essential to our success.

Mr. DIAZ-BALART. How are those priorities taking place in relation to other components of Everglades restoration? There are a lot of projects out there.

Colonel CARPENTER. As we look at all the projects, our job really is to get the water right, quantity, quality and distribution and timing are what we are trying to balance with the needs of where we are on things like purchasing the lands needed for the project and there are a lot of variables. It is a complicated thing. I am not sure I could explain it all to you here.

I will tell you the team working on it, not just Corps, State, Federal, tribal and local community governments and individual citizenry that is involved in this thing, are really committed and we are getting the best and the brightest working on this project.

Mr. DIAZ-BALART. I was interested to hear what Mr. Burns said and he kind of alluded to the fact that it is a very strong team and a lot of people working together.

Obviously not all of those, if you look at the draft master project and limitation schedule, not all of these are going to be able to be done. We are talking about a lot of money immediately. Do we have a list of components that would be done immediately if this is authorized right away? What are those first components? Do you already have that and do you have a handle on that already?

Colonel CARPENTER. Yes, sir. We have a plan based on the congressional language in the WRDA 2000 bill that lays out approximately $200 million State and $200 million Federal, looking to balance that and working simultaneously on plans and specs, construction and also project implementation reports, trying to strike a balance as we work through the process and keep a level approach to long term success.

Mr. Chairman, this is a project that all of us up here obviously are strong proponents of but also we have a lot of support from local, State and other agencies. Lastly, Mr. Burns, you mentioned some recommendations you have. What sort of cooperation are you getting on these issues or is it no, thank you very much, we know what we are doing, get the heck out of here?

Mr. BURNS. That is a good question, Congressman. We met with the project deliver team as I indicated in March 30th. The meeting I felt was excellent. The openness, the willingness to discuss issues and to interact with the committee as exceptional. I would say the cooperation we had was excellent. We have made recommendations that could be followed up on. Our role has ended now so that remains to be seen, sir.

Mr. DIAZ-BALART. Mr. Chairman, thank you very much. Let me thank you again for your support. You have been unbelievably supportive. I would feel remiss if I didn't mention the fact that I think this hearing and it is the first I have had of this type since I have been up here, is crucial to make sure we are doing the right thing, that the money is being well spent, that we are not blowing the taxpayers' money and that it is going to the right places. Again, thank you for your stewardship of the Everglades issue and also the taxpayers' money.

Mr. DUNCAN. Thank you, Mr. Diaz-Balart. You certainly have been a great, great member of this committee and subcommittee in the short time you have been here. We appreciate your work.

Mr. Costello.

Mr. COSTELLO. I first want to thank all of our witnesses for their testimony today. It is good to see Mr. Duke and Ms. Copeland here today as well. They were very helpful to us when we visited the Everglades. I have just a couple quick questions.

Colonel, first of all, to date how much has the Corps of Engineers spent on the implementation of the project of the restoration of the Everglades?

Colonel CARPENTER. For just the Indian River Lagoon or the entire project?

Mr. COSTELLO. The entire Everglades Project?

Colonel CARPENTER. I don't have that number readily available. I will provide it for the record.

Mr. COSTELLO. Can you take a stab at it? Dennis, could you take a stab at it?

Colonel CARPENTER. Probably $150 million has been spent to date is the number Dennis has provided.

Mr. COSTELLO. We won't hold you to that but about $150 million?

Colonel CARPENTER. Yes, sir.

Mr. COSTELLO. Mr. Barnett, the same question for the State of Florida. How much as the State spent on the project?

Mr. BARNETT. Since WRDA 2000, the State legislature and the governing board of the South Florida Water Management District have appropriated and dedicated $915 million exclusively to the implementation of CERP. Most of those funds have been used for acquisition of critical lands needed to implement the infrastructure.

Mr. COSTELLO. In WRDA 2000, there is a 50-50 cost share as you know for authorized projects. I am wondering since the State of Florida is so far out in terms of how much has been spent on the restoration of the Everglades, there are also provisions in WRDA to give credits for the States. I am wondering has then been worked out or have you discussed that yet?

Colonel CARPENTER. Yes, sir. There is a plan. The water bill requires that every five years the 50-50 split is evaluated and make sure that we are accurate. Right now we are in fact accurate in our accounting procedures which are as the State has spent a lot of money on lands, the crediting for those lands is not put in the program until a project cooperation agreement is signed. That comes after money is appropriated and we have not had a PCA for any of the projects to have that real estate piece kick in.

The Federal Government has contributed some funds to land so initially in the first evaluation which is 2005, we are comfortable that it will be a 50-50 crediting issue and we are constantly watching to make sure the State doesn't get too far ahead. It is another one of those things we have to factor in as we look at which projects we are working and which PIRs we are advancing to make sure we meet the requirements set upon Congress on the CERP plan.

Mr. COSTELLO. Do you have anything to add, Mr. Barnett?

Mr. BARNETT. I also want to make sure it is clearly understood that this is a funding formula that we contemplated in early years the State would expend at a higher rate than the Federal Government because that is very typical of a typical Corps of Engineers local sponsor agreement where the primary responsibilities to ac-

quire the land fall on the back of the local sponsor. So we have not been alarmed by the rate of Federal spending and when we went into this, we anticipated that there was some risk in acquiring the land up front but it is a proven formula that has worked in the Kissimmee River and in other restoration projects we have done in the State of Florida and are continuing to acquire land as we speak today.

Mr. COSTELLO. Mr. Burns, in your testimony you describe maybe five pages of recommendations from the review panel and you indicated in your testimony today that you were impressed with the document, that there are considerable number of questions or issues that have to be addressed. It appears there is a lot of work yet to be done either at the design stage or at some point and I wonder if you might comment on that?

Mr. BURNS. That would be the assessment of the panel also that just the uncertainty associated with projects as complex as Indian River Lagoon and the Comprehensive Everglades Restoration Project, that adaptive management is very important as you move forward, gaining additional information as pieces or components of the project are put in place and learning from that, dealing with unanticipated consequences of building projects that haven't been thought of. For example, alga blooms in reservoirs or in the lagoon because of increased residency time for nutrients in the system was a major concern of the panel. This was discussed with the project review team and they certainly understand the issues and we were confident they would be dealing with them through adaptive management.

Adaptive management seems very complex because of the systemwide adaptive management program, integrating individual projects and the data from individual projects into that program, we believe is a complicated, daunting task that will have to be dealt with as the project proceeds.

Mr. COSTELLO. So it is not out of the ordinary, it is typical?

Mr. BURNS. Sir, it is very big, very complicated.

Mr. COSTELLO. Mr. Burns, in your judgment, is the project ready to be authorized for construction?

Mr. BURNS. I might answer that in the negative—I might answer it indirectly. We spent only two weeks looking at the documents, so our view is very narrow. We did not look at other projects in CERP or compare it to other things but we found from a scientific viewpoint that would prevent you from authorizing the project should you see fit.

Mr. COSTELLO. Thank you. Thank you, Mr. Chairman.

Mr. DUNCAN. Thank you, Mr. Costello.

Colonel Carpenter, We have people from all over the country asking us to do projects big and small and it is pretty clear that everybody wants the Federal Government to pay for practically all the cost or most of it, yet the State and local governments, as bad a shape as they are in financially, they are in much better shape than the Federal Government is. Are you satisfied that everybody is working together to try to hold down these costs to some extent? We were told the original estimate on this Indian River Lagoon Project was $936 million and now it is $1.2 billion. It is $271 million higher than the original estimate which is about somewhere

between a 25 and 30 percent increase. What do you think about all that?

Colonel CARPENTER. Mr. Chairman, the increase has a lot to do with inflation.

Mr. DUNCAN. But these have been years of very, very low inflation.

Colonel CARPENTER. That is true but the real major part of this is the additional things that have been added to the authorized project in the WRDA bill when we studied and the adaptive management piece where we looked at the muck removal which provides significant, almost exponential benefits to the project by including that in the project.

When we looked through each component of the project, we were able, using incremental analysis, to benefit costs, is it worth going to that next level, this is where we came out with the optimal plan.

As to the contributions of the State and local governments, it is unprecedented. The overwhelming, positive comments we got on our plan when we sent it out there for the folks working on it who spent years studying this program, it actually was like a boost of adrenalin that everybody understood what we were trying to do and committed to doing it and was kind of united in its effort. I am comfortable on both those fronts.

Mr. DUNCAN. When I asked why we would put this Indian River Lagoon Project ahead of the Southern Golden Gate Project or some of these other 59 or whatever it is, one of the main reasons you gave was water storage. Are there any plans to use that stored water in some way?

Colonel CARPENTER. The water that is stored there, we have no specific plans for that at the current time but we do know that water needs to stay out of the lagoon in the short time. We also know that as we bring other projects on-line, we will need that water. At the end of the day, the areas of the Everglades that are starving for water are going to need this capability that we have harnessed right here in Indian River.

Mr. DUNCAN. Colonel Carpenter brought up the muck, the 7.9 million cubic yards of muck. I am certainly not an expert on that or know very little about it but I am told Mr. Barnett or Mr. Smith that some of the local people have some kind of unreasonable expectations about how much good that is going to do. They tell me there is still going to be very harmful discharges of sediment or poor water quality projects, poor water quality in the lagoon. What do you all say about that? Do you realize that or do you disagree with that? What is the situation in that regard?

Mr. BARNETT. Let me give you kind of a State perspective and I will defer to the chairman from Martin County for a more local view.

As we looked at implementing the Comprehensive Everglades Restoration Project, although our key focus is restoring the Everglades, one of the ancillary and equally important benefits is to undo some of the egregious harm that operation of the Central and Southern Florida Flood Control Project has caused to the coastal estuaries. Statistically, without these elements and other elements in the plan, once in every three years, we blow out the estuaries with unaccessible high discharges of fresh water that carry sedi-

ment laden flows into the estuary and the estuary is slowly being filled in with this muck that is coming from an unnatural connection between Lake Okeechobee and the estuary.

Pre-drainage, pre-implementation of the CMSF project there was not a direct hydrologic connection and the large flows that came out of the lake, 90 percent flowed south. Today, about 80 to 85 percent of all the water that leaves Lake Ocheechobee is shunted to the east and west to the Glucahatchee and the St. Lucie Estuary. So to answer your question, of course we need to intercept and remove those harmful flows and store them in the reservoirs and the dynamic storage areas that the Indian River Lagon 90,000 acres of dynamic storage gives us but in addition to that, I think it is incumbent upon us in government to begin speeding up the healing of the estuary by removing as much of the much as we can.

I will tell you when the plan is fully implemented, when these project components along with the storage and the EA which was already authorized, storage in the C-43 basin and storage above Lake Okeechobee are fully implemented, we will take that one in three year event cycle that is happening now and reduce it to a one in 30 year occurrence. I feel strongly from the State perspective why did we go first with these projects, why we expedite the interception of these flows and why we do something about the sedimentation is critically important to restoring that part of the ecosystem that has been unintentionally harmed by the operation of the CMSF project.

Mr. DUNCAN. Do you want to add anything, Mr. Smith?

Mr. SMITH. I don't know if I could add a heck of a lot more to that other than the fact that we are an interconnected system. Kissimee Basin has had tremendous restoration efforts thus far and we are the next link in the chain. Being in between the Kissimee and the Everglades, we do in Martin County clearly provide that next piece of the link. The Indian River Lagoon South Program will function as that connection.

There are benefits in the future from both the storage capacity but also the cleansing. When the Florida Bay needs the water, it will be coming from the north from us and be coming clean versus the sediment laden we experience now in the Indian River Lagoon and the St. Lucie Rivers as well.

As for the muck removal, we are looking forward to the fact we can get that muck out of the river. It is probably one of the most damaging things we have had to deal with in terms of degradation of the estuary and the river itself. We look forward to its challenge but it is clearly a very important piece of the puzzle.

Mr. DUNCAN. Ms. Gromnicki, how important do you think this Indian River Lagoon Project is to the entire comprehensive plan? Would you rate this as the number one project that you had total and complete control, do you think it is more important than the Southern Golden Gate Estates Project or some other project?

Ms. GROMNICKI. I think it is very important. The Indian River Lagoon Project is a priority for Audubon but the important thing to keep in mind is what Congress authorized was a program to restore an entire ecosystem. We need to restore the entire ecosystem. We can't just cherry pick projects from the program.

This project uniquely, as well as Southern Golden Estates, are very two unique opportunities to increase the spacial extent of habitat for the 69 threatened and endangered species in the ecosystem. That is one of the reasons we think it is incredibly important to do it early given the fact that it is a land intensive project and lands are under attack and values of lands are increasing exponentially ever year. If we don't get this project implemented now, we will not have the opportunity to increase the spacial extent of habitat for those threatened and endangered species of the Everglades ecosystem.

Mr. DUNCAN. You say not to cherry pick, of course we almost have to cherry pick to some extent because we can't do all 60 of these projects or whatever all at once.

Mr. Burns, what would happen if we didn't do this project first? Is this the best thing we can do right at this time, right now, or do you think there are some questions or problems that you feel are associated with it that need some more study and some more work before we proceed?

Mr. BURNS. I don't believe I could speak for the panel with a recommendation on this project in relationship to other projects in the program because we really didn't look at anything outside this project. There are certainly things that have to be done on this project as it moves forward and there are many uncertainties with this or any other project.

From the panel's viewpoint, we did not see anything in our review that would prevent you from authorizing the project at this time.

Mr. DUNCAN. Thank you very much.

Mr. Costello, any comments to close out?

Mr. COSTELLO. No, Mr. Chairman, other than to again thank you for holding this hearing and I thank the witnesses for offering their testimony and being here today.

Mr. DUNCAN. We have three votes that are about to take place on the floor. We appreciate you all being here, you have been very helpful and informative.

That will conclude this hearing.

[Whereupon, at 3:05 p.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

Testimony for the Record
Water Resources Development Act of 2004
Ernie Barnett
Director of Ecosystem Projects
Florida Department of Environmental Protection
Presented to
Committee on Transportation and Infrastructure
United States House of Representatives

Extending from the Chain of Lakes south of Orlando to the reefs beyond the Florida Keys, the Everglades ecosystem covers 18,000 square miles. Historically, freshwater flowed south from Lake Okeechobee to the Florida Bay in a broad, slow-moving sheet – 120 miles long and 50 miles wide but less than a foot deep. As the second largest wetland on Earth, the famed *River of Grass* provides habitat for hundreds of species of birds, fish and other wildlife.

In the late 1800s primitive canals were dug to drain vast areas of wetlands in south Florida. Additional alterations continued throughout the 20th century and more than 1,700 miles of canals and levees altered the landscape, interrupting the Everglades' natural sheetflow and sending essential freshwater to sea. An astounding two million acres of wetlands -- more than half the Everglades -- were lost to development.

In 1947, Marjory Stoneman Douglas first drew attention to the plight of the Everglades, describing an ecosystem that was beautiful yet suffering. Just one year later, a massive project to manage water and provide flood protection in South Florida was approved. The Central and Southern Florida Flood Control Project included the construction of more than 1,000 miles of levees, 720 miles of canals and almost 200 water control structures. While the project allowed regional growth, it altered the timing, quantity and quality of water delivered to the Everglades. Much of the drained area was developed or used for agriculture, and by the 1980s, water quality was degraded by nutrients, particularly phosphorous, and the ecological condition of the ecosystem had deteriorated.

With alterations to the ecosystem, more than half of the Everglades was lost, fresh water flow declined by 70 percent and wading bird populations dropped by 90 percent over the life of the Project.

In 2001, the federal government and Florida approved a plan to restore the magnificent *River of Grass.* The Comprehensive Everglades Restoration Plan will capture 1.7 billion gallons of freshwater per day currently lost to sea, directing it back to the ecosystem to revitalize habitat, improve water quality and provide a reliable water supply for millions of South Floridians.

By removing miles of levees and canals, the restoration plan will reestablish the essential defining features of the historic Everglades -- its large size and interconnected water system -- balancing environmental restoration with socioeconomic needs.

Florida's Commitment

Restoration of America's Everglades is ahead of schedule. In the three years since Congress authorized the Comprehensive Everglades Restoration Plan, the State of Florida, in partnership with the federal government, has achieved more to return a natural flow of water to the 2.4 million acre marsh than in the entire preceding decade.

On the second anniversary of the signing of Everglades restoration legislation, Florida acquired the first 10,000 acre-feet of water storage – seven years ahead of schedule. More than 80 percent of the land needed for Congressionally-authorized construction projects is already in public ownership.

Florida adopted a stringent, science-based water quality standard of 10 parts per billion for phosphorus in the Everglades. Florida completed construction of the world's largest man-made wetland, which uses plants to filter pollution from water entering the Everglades. Man-made treatment marshes, along with improved farming and urban management practices, have cut phosphorus entering the Everglades by more than 60 percent. Completion and optimization of these "green" technologies are projected to reduce phosphorus by a total of 93 percent by 2006.

Last October, Florida donated the last parcel of state-owned property to complete the massive expansion of Everglades National Park. A total of 42,000 acres of state land was conveyed to the federal government to accomplish plans to grow the park by 109,000 acres. That same month, Florida began restoring a more natural flow of water to more than 50,000 acres of wetlands in Southwest Florida, the first construction project of 30-year project, again ahead of schedule.

Recent studies indicate that mercury concentrations found in fish and wading birds in the Everglades have dropped by 60 to 70 percent over the last generation. The drastic reductions are directly linked to the installation of technology that reduced mercury in emissions from industries in South Florida by a 100-fold during the last two decades.

The secret to Florida's success is staying focused on first-rate science, engineering and management. This proven formula is protecting water quality, securing funding and safeguarding the water needed for Everglades restoration under Florida law.

Everglades Funding

Under the leadership of Governor Jeb Bush, Florida's is demonstrating its commitment to the *River of Grass* with actions rather than words. Florida is fully funding Everglades restoration each and every year, committing $200 million annually to fulfill its share of the 30-year, $8 billion plan. Since 2000, Florida has invested more than $915 million and committed another $1.7 billion through the end of the decade to restore water quality and flow in America's Everglades.

Our funding strategy is straight forward -- half of the funds come from the state and the other half is provided by the South Florida Water Management District. Just this year, Governor Bush and the Florida Legislature set aside $100 million in cash to fund debt-free restoration, with

another $75 million proposed in the upcoming South Florida Water Management District's budget. By coupling secure and reliable funding sources with the authority to bond, Florida is meeting its financial commitment without incurring additional debt.

Historic State and Federal Everglades Agreement

On January 6, 2002, one year ahead of schedule, Florida entered into an historic agreement with the federal government to ensure water is first reserved to save America's Everglades. President George W. Bush and Florida Governor Jeb Bush met in the Oval Office to sign a pact to set aside water for environmental restoration.

The water needed for the natural system will be identified during the design of 68 individual projects that make up the Comprehensive Everglades Restoration Plan. The agreement also assures that water reservations are continually monitored and assessed for effectiveness.

Beneficiaries include the natural resources of Everglades National Park, the Loxahatchee National Wildlife Refuge, the Ten Islands National Wildlife Refuge, and the Water Conservation Areas, along with 68 endangered and threatened species that call the Everglades home. Once the needs of the environment are met, remaining water will be available for regional water supply.

Indian River Lagoon – South

The Indian River Lagoon is an estuary of national significance, a Florida Aquatic Preserve and an Outstanding Florida Water. The most biologically diverse estuary in North America, more than 4,000 species of plants and animals are found in its waters.

For decades, the Central and Southern Florida Flood Control Project directed nutrient and sediment-laden freshwater into the St. Lucie River and the Indian River Lagoon. As a part of the Comprehensive Review Study, the U.S. Army Corps of Engineers and South Florida Water Management District completed a thorough scientific evaluation and developed a comprehensive plan to restore this critical part of the South Florida ecosystem. When complete, the $1 billion restoration project will restore more than 53,000 acres of wetlands, reduce pollution, and provide water storage -- returning a natural flow of fresh water to the St. Lucie and Indian River estuaries.

The plan includes construction and operation of 12,000 acres of inland reservoirs and 9,000 acres of pollution-filtering treatment marsh. To restore habitat within the estuaries, the plan also recommends removing more than 5 million cubic yards of muck from the waterways.

Along with reducing reliance on the Floridan Aquifer for water supply, the plan provides important water storage including more than 120,000 acre-feet in reservoirs and stormwater treatment areas and 90,000 acres of natural storage in the Allapattah, Palmar, and Cypress Creek basins. The reservoirs and treatment marshes offer an alternative to discharging excess water into the St. Lucie River that can harm habitat and degrade water quality.

The Indian River Lagoon South Restoration Project is the result of a dedicated partnership between federal, state and county governments and the invaluable contributions from the local community.

The leadership of the U. S. Army Corps of Engineers and the South Florida Water Management District combined with the tenacious support of Martin and St. Lucie Counties and important contributions from the Florida Department of Environmental Protection led to the design of a sound, scientific plan for environmental restoration. The plan received its most valued support from the citizens of Martin and St. Lucie Counties, through organizations such as the St. Lucie River Initiative, the Conservation Alliances of Martin and St. Lucie Counties, the River Coalition and the Indian River Citrus League.

Approval of the plan to protect the Indian River Lagoon is the next step in the restoration of America's Everglades. The State of Florida strongly supports the recommended plan. Further modifications of the Project Implementation Report related to the protection of pre-project beneficial flows of water to the St. Lucie River and the Indian River Lagoon and the method for providing the South Florida Water Management District credit for lands, easements and rights-of-way will strengthen this comprehensive approach.

Southern Golden Gate Estates

The Southern Golden Gate Estates Hydrologic Restoration project will restore more than 55,000 acres of wetlands and improve the health of coastal estuaries in the western part of the Everglades ecosystem. As part of a joint commitment, the State and federal government invested nearly $100 million to acquire more than 19,000 individual lots in an abandoned subdivision and return the area into the vast watery wilderness it was less than a century ago.

When complete, the project will reduce fresh water drainage from the Fakahatchee Strand, replenish valuable groundwater supplies and restore habitat for threatened wildlife. The project includes a combination of spreader channels, canal plugs, road removal and pump stations in the Western Basin and Big Cypress, Collier County, south of I-75 and north of U.S. 41 between the Belle Meade Area and the Fakahatchee Strand State Preserve.

To accelerate the Comprehensive Everglades Restoration Plan, the State of Florida broke ground on this first construction project less than a year ago. As part of the first phase, engineers are moving more than 45,000 cubic yards of dirt to backfill seven miles of the Prairie Canal, removing 25 miles of roads and clearing exotic plants from canal banks to speed the return of natural vegetation.

Environmental results are already evident. Early restoration is reducing freshwater drainage of the Fakahatchee Strand State Preserve, elevating groundwater levels and replenishing the wetland habitat. Florida will complete the first phase by October 2005.

Returning the natural sheetflow of water through Southern Golden Gate Estates will also benefit federal trust resources including the Ten Thousand Islands National Wildlife Refuge, the panhandle of Everglades National Park, and the Florida Panther National Wildlife Refuge.

The State of Florida strongly supports the authorization of the recommended plan for the Southern Golden Gate Estates Hydrologic Restoration Project and looks forward to continued partnership with the federal government

Closing

Less than four years have passed since Congress passed the Water Resources Development Act authorizing the Comprehensive Everglades Restoration Plan. Florida is making unprecedented progress to reduce pollution, improve water quality and restore flow in the Everglades. Even during these early days of implementation, significant milestones are being achieved, ahead of schedule and under budget, with many more to come.

The State of Florida has forged a complete and equal partnership with the federal government to protect national interests by returning a natural flow of water to America's Everglades. It is a broad solution for ecosystem restoration, water supply and flood control. Recognizing responsibilities, rights, benefits and risks, Florida remains committed to fulfilling its share of a partnership that will fully restore America's Everglades.

Restoring Southern Golden Gate Estates and the Indian River Lagoon is the next step in this long-term endeavor. The State of Florida urges your support.

Department of
Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Colleen M. Castille
Secretary

August 25, 2004

The Honorable John Duncan, Chairman
Water Resources and the Environment
Committee on Transportation and Infrastructure
United States House of Representatives
B-376 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Duncan,

Thank you for the opportunity to present the State of Florida's support for the Indian River Lagoon – South and the Picayune Strand – Southern Golden Gate Estates Restoration Projects at your committee meeting on July 22, 2004. These projects are key components of the Comprehensive Everglades Restoration Plan.

The following responses to your follow-up questions are submitted for your consideration:

1. In the State's view, how important is the Indian River Lagoon project compared to other restoration projects in the Comprehensive Everglades Restoration Plan? Does the State prioritize projects?

Restoration of the Indian River Lagoon is of critical importance to the State of Florida and the nation. The Indian River Lagoon is recognized as an estuary of national significance. The Lagoon is a Florida Aquatic Preserve and an Outstanding Florida Water and is the most biologically diverse estuary in all of North America. More than 4,000 species of plants and animals have been found in its waters. For decades the Central and Southern Florida Flood Control Project (C&SF Project) has directed excessive amounts of nutrient and sediment laden freshwater into the St. Lucie River and the Indian River Lagoon. Restoration of Indian River Lagoon reverses decades of environmental harm caused by the operation of the C&SF Project while providing environmental benefits to Lake Okeechobee and America's Everglades. When complete, the project will restore more than 53,000 acres of wetlands, reduce pollution and provide water storage to return a natural flow of fresh water to the St. Lucie and Indian River estuaries.

The Indian River Lagoon project is one of 68 projects necessary for the restoration of America's Everglades. This project, working in concert with the other 67 projects, is necessary to meet the overarching objective of the Comprehensive Everglades

Restoration Plan that will restore, preserve, and protect the South Florida ecosystem while providing for other regional water-related needs, including water supply and flood protection.

The State of Florida and the US Army Corps of Engineers jointly develop a master implementation sequencing plan for all of the projects in the Comprehensive Everglades Restoration Plan. The Indian River Lagoon is one of the first projects needing authorization under the joint sequencing plan. Strong development pressure in the area make it critical that the State and federal government move forward with this restoration -- delay is likely to lead to a lost opportunity. (From the Chief's letter transmitting the Chief's report.)

2. Storm water and Agricultural runoff is a local responsibility. Why should the federal government pay for what is essentially a local responsibility?

The Indian River Lagoon plan is not designed to remedy local stormwater and agricultural runoff, which remain local responsibilities. As a part of the Comprehensive Review Study, the Indian River Lagoon – South Project Implementation Report developed a plan to rectify the freshwater impacts from the operation of the federally authorized C&SF Project and to restore the Indian River Lagoon, St. Lucie River and tributaries to the habitats that existed before the C&SF Project.

3. What economic benefits to the nation would come from building the Indian River Lagoon project?

The Indian River Lagoon – South Project will restore water quantity and quality within the St. Lucie Estuary and the Indian River Lagoon by reducing the damaging effects of nutrients, pesticides and other pollutants from watershed runoff. The project will also improve salinity levels by reducing freshwater discharges.

The Indian River Lagoon ecosystems support a significant amount of outdoor recreation and tourism in the Upper East Coast of Florida. The current expenditure estimates and consumer surplus for Indian River Lagoon-related recreation is more than $191 million annually. Improving the environmental health of the estuary will provide economic benefits by enhancing eco-tourism, recreation and agricultural water supply. Improving the environmental quality of the ecosystem will substantially support and sustain local recreation-based businesses and improve agricultural productivity.

Other project benefits include:

- 12,000 acres of above ground storage.
- 9,000 acres of man made wetlands.
- 90,000 acres of natural areas, including 53,000 acres of restored wetlands, providing additional water storage.
- 90 acres of artificial submerged habitat created for aquatic vegetation.
- 922 acres of submerged aquatic vegetation restored.
- 7.9 million cubic yards of removed muck.
- 41 percent long-term reduction in phosphorus.
- 26 percent long-term reduction in nitrogen.

- 2,650 acres of benthic habitat created in St. Lucie River and Estuary.
- 889 acres of restored oyster habitat.
- $6.1 million annual average in improved agricultural productivity, through improved freshwater supplies.

4. The Indian River Lagoon Project is not in the same watershed as Everglades National Park, so one could argue that the project will not benefit the Everglades. Does the State have any plans for the use of the water in the proposed Indian River Lagoon reservoirs? What are some of the possible uses?

America's Everglades encompasses more than just Everglades National Park. The Indian River Lagoon Project is part of the greater Everglades ecosystem and is hydrologically connected to the Kissimmee – Lake Okeechobee – Everglades watershed via the C&SF Project.

The Indian River Lagoon Project Implementation Report identifies the additional water made available for the natural system and to meet other water related needs of the region. The Project Implementation Report also identifies the appropriate quantity, timing and distribution of water dedicated to - and to be managed for - the natural system to ensure restoration is accomplished. The State of Florida commits to ensure, through appropriate and legally enforceable means under Florida law, that the quantity, quality, timing, and distribution of water identified in the Project Implementation Report will be available to the St. Lucie River and southern Indian River Lagoon at the time the Project becomes operational and will remain available to the St. Lucie River and southern Indian River Lagoon for so long as the Project remains authorized.

The Comprehensive Everglades Restoration Plan is a broad solution for ecosystem restoration, while providing for other water related needs of South Florida. Florida has forged a complete and equal partnership with the federal government to protect our national interests by restoring America's Everglades. The next step in this long-term partnership is implementation of the Indian River Lagoon – South and the Picayune Strand – Southern Golden Gate Estates projects. Thank you again for the opportunity to provide our thoughts on these very important environmental restoration projects in Florida

Sincerely,

Ernie Barnett
Director of Ecosystem Projects

/eb

cc: Secretary Colleen M. Castille
Nina Oviedo
Jennifer Fitzwater
Sean Taylor

WRITTEN TESTIMONY OF

JOHN J. BURNS
CHAIRMAN, INDEPENDENT SCIENTIFIC REVIEW PANEL
INDIAN RIVER LAGOON – SOUTH PROJECT

BEFORE THE

SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT
OF THE
HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

July 22, 2004

Mr. Chairman, and Members of the Subcommittee, good morning, and thank you for inviting me to discuss the work of the independent scientific review Panel for the Indian River Lagoon – South (IRL-S) Final Project Implementation Report and Environmental Impact Statement. My name is John Burns and I am a former Corps of Engineers Planner, having retired from the Corps in July 2000. I currently work as an independent contractor providing consulting services in the area of water resources planning. I served as the Chairman of the Independent Scientific Review Panel for the Indian River Lagoon – South Project with my fellow panel members Dr. Steven Bartell from the Cadmus Group in Maryville Tennessee, Dr. Darrell Fontane from Colorado State University, Dr. William McAnally from Mississippi State University, Dr. Louis H. Motz from the University of Florida, and Dr. Robert Twilley from Louisiana State University.

THE PROCESS

The U. S. Army Corps of Engineers Jacksonville District commissioned the panel to conduct an independent scientific review of the Indian River Lagoon – South (IRL-S) Final Project Implementation Report and Environmental Impact Statement. The Panel was commissioned to establish if the studies conducted by the government and its partners utilized sound scientific methods, principles, and data. The intent of the Panel's review was to ensure that the plans presented in the analysis met the restoration objectives and that the plan formulation and project benefits are supported by sound science. The goal was to maximize the likelihood of a restoration plan's technical success, credibility, and defensibility.

The Panel conducted an expedited review as the report was being finalized for forwarding to Washington. The Panel received the PIR/EIS for review on March 6th of this year, individual panel member questions, comments, and, areas of concerns were provided to the Corps on March 22nd. Following submission of the Panel's comments, a workshop was held in Jacksonville, Florida on March 30$^{th.}$ The workshop consisted of a briefing on the project for the Panel followed by a discussion of the Panel's comments

and the Project Delivery Team's responses. Following that meeting the Panel continued its review of the documents, developed Panel views on the Project Delivery team's responses, noting where the Panel felt that the comment had been adequately addressed, and in some instances, noting areas where additional analysis was recommended as the project is implemented and completed its report. The final report was provided to the Corps Jacksonville District on May 3rd.

FINDINGS

In general the Panel found that the Project Implementation Report stands as an impressive document that addresses a substantial number of issues with an obvious concern for achieving public goals and legislated directives. The team that created the Report, as well as those individuals responsible for integrating the pieces into a coherent whole should be highly commended for their efforts. It is the opinion of this review panel that the plans presented in the Report have a high likelihood of meeting the restoration objectives and that the supporting technical analyses are based upon sound science. Nevertheless, there are considerable uncertainties inherent to a project of this complexity. Therefore, the panel has made recommendations for additional detailed analyses as this project is implemented.

PANEL RECOMMENDATIONS

- **Modeling**
    - The Panel recommends that during the next phase of the project, that supporting modeling activities include climate and sea level change analysis.
    - The Panel recommends that the operation of the project components, such as the reservoirs, be more completely defined and tested during the next phase. Successful operation of the reservoirs under future conditions is a key to the success of the overall restoration plan.
    - The Panel strongly recommends the development and application of additional ecological models to forecast the likely outcomes of proposed restoration actions in the South Indian River Lagoon. The Panel identified topics of possible concern that might be usefully examined through the development of ecological models or the application of existing models. The production dynamics of phytoplankton and values of other water quality parameters (e.g., low dissolved oxygen, agrochemicals, Hg) in the proposed reservoirs might pose problems in using the reservoirs to manipulate inflows to the SLR in order to stabilize fluctuating salinity regimes in the estuary. Flow control in relation to future sediment loading of the system was also raised as a possible concern.

- Consumer organisms (e.g., sea turtles) and harvesting by humans may prove important in determining the effectiveness of SAV and oyster restoration. More comprehensive models than the current oyster stress model and the salinity-substrate submerged aquatic vegetation (SAV) model could be used to examine the possible implications of grazing and harvesting. In lieu of such modeling, the Panel urges that RECOVER focus on measuring rates of oyster and SAV recovery following the construction of the proposed Indian River Lagoon - South project.

- Sediment transport and the future movement of muck appear to be plausible results of the proposed Indian River Lagoon - South restoration and management project. There appears to be an opportunity for some potentially insightful sediment transport and deposition modeling. The results of this modeling activity might also prove useful in further elaborating the nature of future favorable substrate distribution and location in relation to SAV recovery.

- The Panel strongly advocates the completion of the proposed oyster mesocosm experiments and rigorous evaluation of the experimental results in relation to improving the current oyster stress model.

- The Panel also raised an issue concerning the groundwater monitoring program described in the Project Implementation Report based on the results of a groundwater flow model (i.e., the 15% of total water discharged). Specifically, the panel was concerned that two wells were insufficient to monitor these flows. The Project Delivery Team described the groundwater monitoring element as intended to determine if elevated nutrients are being discharged from the site through groundwater to the regional canal system, and subsequently to the Indian River Lagoon. This plan is a draft and will be modified to address specific issues of the individual natural area properties. Additionally, existing well sites on the property that are currently being sampled and analyzed for nutrients will provide a background for assessing the effects of groundwater discharges to the regional canal system and determination if additional wells will be required. However, the panel concern was more on the accuracy and precision of the groundwater model, given the stated intention to monitor only if the model results suggest that 15% or more of the total discharge enters the system through groundwater sources. Simply stated, if the decision to add two wells will be based on the model results, how reliable is the model in relation to the 15% decision criterion? This seems not to have been addressed in the response or in our discussion during the review meeting.

- **Ecology**

  - The specific process by which the Project Implementation Report is incorporated and used in the Adaptive Management framework as a point of reference is still not completely described in Comprehensive Everglades Restoration Plan (CERP). The Panel feels that each project within the CERP program will have to assume some responsibility in assuring that the Project Implementation Report document be a reference to the 'working document' of the monitoring and assessment program within CERP (e.g. RECOVER). Resolution of how to modify initial conceptual and numerical models, including their assumptions, will have to be worked out in the development of the adaptive management program.

  - The panel feels that not all of the thresholds relative to healthy ecosystem response have been resolved. Links between the hydrodynamic model with the HSI models for oysters and SAV are driven by salinity and light, respectively. These links are well documented in the Project Implementation Report, but there were other issues of ecosystem state change, such as dissolved oxygen and phytoplankton blooms, that were acknowledged, but not resolved. And these thresholds have to be passed to the CERP adaptive management program. The process to accomplish this was not clearly defined. Much of this restoration effort will depend on the operations and management phase of this project. Successful restoration depends on a strong adaptive management framework.

  - The Panel also raised the issue of how different restoration measures might influence system response in ways that the have not been considered or evaluated in the Project Implementation Report. For example, the Panel raised the issue that increasing the depth sections of IRT by 13 feet could increase stratification of the water column during periods of freshwater release. It may be important to have stratification of the water column as a performance measure, or at least as a criterion for system remediation. The issue is that estuary depth, freshwater delivery (quantity and timing), and nutrient inputs will all contribute to patterns of phytoplankton production and organic matter degradation. Importantly, these estuarine processes will influence the balance of dissolved oxygen in the water column. The Project Implementation Report does not include dissolved oxygen as a performance measure; and does not describe system responses that may change patterns of dissolved oxygen concentrations. The Project Delivery Team acknowledges that this issue will have to be resolved during the adaptive management process of project construction and management. The issues of how the proposed project will affect vulnerability to eutrophication will have to be a close cooperative effort between the federal and local sponsors, as well as federal partners that have particular interests in water quality issues.

- The assessment methodology for the project, as well as the system, are still being developed, but should be completed during the next fiscal year. This assessment process will be the heart of the adaptive management program and ultimately guide the operational changes made in the future. But as stated several times in this report, there needs to be some assurances that the comprehensive adaptive management plan will be linked to the project level management structure.

- **General Engineering**

  - In a system with multiple, interconnecting components, it is important to assess whether a failure in any of the sub-components might have the undesired impact of causing a major failure in the overall system. It was understood that the next phase of the project would examine these issues in greater detail. It is also understood that the engineered system will incorporate various engineering redundancies to minimize the likelihood of a system component failure. The Panel heard that the project intends to have a real-time data collection and transmission system so that system operation can be dynamically controlled. The Panel feels that a high degree of operational flexibility and control will be an important part of the potential success of this project.

- **Water Quality**

  - The panel is concerned that algal blooms, particularly harmful algal blooms (HAB), could be a major water quality issue in this project (see Water Quality section of this report). One of the critical questions, that is not included in the conceptual model of this estuarine ecosystem, is "How will changes in freshwater residence time, along with levels of nutrient loading, influence patterns of phytoplankton production in the estuary?". The interaction between the levels of nutrient loading and the residence time of the estuary (freshwater residence time) still need to be addressed. The system-wide adaptive management program needs to clearly define how it will improve the operations and management of individual projects such as Indian River Lagoon. Another option is that this issue could be held accountable in review of the project development phase with more defined modeling efforts. The Panel recommends that the design phase of the project employ proven three-dimensional numerical model(s) to examine water quality effects of the plan and its operation in the reservoirs and estuary.

  - The Panel recommends that the design phase of the project include calculations of sediment accumulation rate in the reservoirs and storm water treatment areas to determine if design elements such as traps should

be used to prevent excessive infilling that will reduce capacity and may worsen water quality.

- The Panel recommends that the operational plan provide guidance to the RECOVER group on monitoring needed for the project's adaptive environmental management program by working backwards from a well-specified management decision process in order to construct a set of models and monitoring with known statistical performance commensurate with the needs of the decision-makers.

- **Hydrology**

  - The interagency report recommends additional subsurface investigations for all of the basins to collect data to finalize the design of the embankment dams and the stormwater treatment areas (STAs) [p. C-26]. The additional investigations, which would be used to characterize site hydrogeology and engineering geology, would consist of additional core borings, groundwater monitoring wells, aquifer performance tests, slug tests, test pits, soil and water sampling for laboratory testing, field inspection, and other tests. The Panel supports this recommendation in the interagency report and makes its own, supporting recommendation for additional site-specific investigations to characterize more fully the hydrogeology and engineering geology at the locations of each of the proposed embankment dams to finalize the design of these facilities.

- **Plan Formulation and Evaluation**

  - Statements in the Project Implementation Report indicate 88% restoration of the estuary without other CERP projects in place. The Panel is concerned that these statements understate the importance of other CERP components in the restoration of Indian River Lagoon.

  - The real value of the economic analysis presented in the report is in the documentation of the evaluation and comparison of alternatives and in analyzing the tradeoffs among alternatives. The report would be improved by adding a section that brings all the factors together in an analysis of the final array of alternatives so that the reader can see all of the inputs/costs and the outputs/benefits for all of the alternatives to gain a better understanding of the tradeoffs among alternatives.

SUMMARY

The proposed Indian River Lagoon - South Project is a complex undertaking. It is therefore challenging to analyze from a comprehensive systems perspective. Such an analysis must consider the complexities of the physical aspects of the system, the number of control features considered, the operational complexities, the modeling complexities, and other factors. As a review panel, it was a challenge to try to integrate all the comprehensive information in the documents in the short time frame available. The workshop in Jacksonville was very helpful in that regard. The Panel holds the project delivery team and the work done so far in high regard. There are, however, considerable uncertainties inherent in a project of this complexity. Therefore, the panel has made recommendations for additional detailed analyses as this project is implemented. The Panel appreciates the opportunity to have been part of this important undertaking and hopes that its review will be found to have added value to the process.

COMPLETE STATEMENT OF

COLONEL ROBERT M. CARPENTER
COMMANDER, JACKSONVILLE DISTRICT
U.S. ARMY CORPS OF ENGINEERS

DEPARTMENT OF THE ARMY

BEFORE THE

Transportation and Infrastructure Committee
UNITED STATES HOUSE OF REPRESENTATIVES

JULY 22, 2004

Introduction

Mr. Chairman, Members of the Committee, I am Colonel Robert M. Carpenter, Commander, Jacksonville District, U.S. Army Corps of Engineers. I am pleased to be here today and to have the opportunity to speak to you on the Indian River Lagoon – South (IRL-S) Project Implementation Report (PIR), the first major report being finalized as part of the most innovative, challenging, and necessary environmental restoration program ever undertaken, known as the Comprehensive Everglades Restoration Plan (CERP). This part of Indian River Lagoon is an estuary of national significance, recognized by the U.S. Environmental Protection Agency National Estuary Program and designated a Florida Aquatic Preserve and Outstanding Florida Water. This important project is a culmination of efforts by the Corps of Engineers, its partner, the South Florida Water Management District, the State of Florida, and many other dedicated partnerships between Federal, state and local governments, with invaluable support from local communities. My testimony today will also provide information on the background of the CERP, the problems and opportunities in the southern portion of the Indian River Lagoon, the recommended plan features, project cost, the expected benefits of the project, authorization requirements, and the current status of the PIR. As you know, the Indian River Lagoon – South PIR is currently under final policy review in the Corps Headquarters and the recommendations of the Chief of Engineers will be forwarded to the Assistant Secretary of the Army for Civil Works by July 30, 2004 for review by the Administration.

I will also be testifying about the Picayune Strand ecosystem restoration proposal, another effort we are conducting in partnership with the South Florida Water Management District and many other groups. We have releases this report for public review and we expect to complete the final PIR by December 31, 2004.

Indian River Lagoon South Restoration - PIR

Background

Because this is the first major project to come before you since WRDA 2000, I would like to take a moment to summarize the current situation in South Florida.

The Florida Everglades have been significantly impacted by the continuing development of south Florida and the numerous changes to the natural system affecting the quantity, quality, timing, and distribution of water to that system. In order to stop the continued decline of the Everglades and the estuaries, and restore the natural functioning of this unique ecosystem, the Federal Government and the State of Florida have launched a massive effort, unparalleled in history, to preserve, protect, and restore the Everglades. Congress approved the framework for this restoration effort in the Water Resources Development Act (WRDA) of 2000. The framework Congress approved in WRDA 2000 is the Comprehensive Everglades Restoration Plan (CERP). As stated in WRDA 2000, "The overarching objective of the Plan is the restoration, preservation, and protection of the South Florida ecosystem while providing for other water-related needs of the region, including water supply and flood protection".

Success for the natural system of South Florida will be achieved by restoring and sustaining those hydrological and biological characteristics that both defined the original pre-drainage greater Everglades and made it unique among the world's wetlands. These defining characteristics include the great extent of naturally interconnected and interrelated wetlands; sheet flow; extremely low levels of nutrients in freshwater wetlands; high levels of estuarine productivity; and the great resilience of the plant community mosaics and abundance of native wetland animals. Although the future Everglades ecosystem will be a "new" Everglades because it will be smaller than the pre-drainage system, restoration will be successful if the new system behaves as a wild Everglades system rather than as a set of managed, disconnected wetlands.

The Indian River Lagoon, St. Lucie River and St. Lucie Estuary, like the Everglades and Lake Okeechobee, are natural systems in distress; suffering from water levels that fluctuate drastically with inundations of fresh water during the storm season and very little fresh water in times of drought. These problems have been studied for many years and we have a have confidence that the stress to fish, oyster beds, and sea grasses will be alleviated by the Indian River Lagoon – South project producing substantial benefits to this portion of the south Florida ecosystem. Under present conditions, the southern portion of Indian River Lagoon will continue to deteriorate and will remain in imminent danger of ecological collapse as a result of the current regional water management practices for which there are no viable alternatives.

Problems

Martin and St. Lucie counties – Florida's "Treasure Coast" – encompass some of the state's most productive and most threatened estuarine treasures, the Indian River Lagoon and St. Lucie Estuary. Home to more than 4,300 species of plants and animals, of which 35 are threatened or endangered species, and supporting an annual economic activity of more than $730 million, the lagoon region is identified as the most biologically diverse estuarine system in all of North America (Gilmore 1986).

The lagoon and estuary have suffered from altered water flow patterns and degraded water quality. In the past few years, intensive rains required additional floodwater releases from Lake Okeechobee, this combined with storm water runoff arriving in the estuary through drainage canals, altered the salinity balance in the estuary, stressing its unique ecosystem. In the South Florida ecosystem, roughly 50 percent of the pre-drainage wetland area and 90 percent of pinelands have been lost to development. Within the Indian River Lagoon watershed, neighborhoods and farms popped up all around the estuary's 827-square mile watershed. Outdated storm water management systems and runoff from urban and agricultural areas caused an increase in the volume of fresh water, sediment, and nutrients entering the estuary and lagoon.

Opportunities

The Indian River Lagoon - South Restoration Project will significantly reduce the damaging inflows of pollution and unnaturally large freshwater discharges into these ecologically vital water bodies. The delicate balance of fresh and salt water in the lagoon and estuary will be restored, polluted water will once again be naturally treated and depleted habitats will be allowed to revitalize. The IRL-S plan provides a unique opportunity to increase the spatial extent of short hydroperiod wetlands and restore habitat for a myriad of species dependant on this habitat for their survival.

The Indian River Lagoon - South PIR employs a regional approach to the problems of the combined Martin County and St. Lucie County portion of the lagoon, and provides five major features and/or operational modifications that working together would: restore a more natural volume and location of freshwater deliveries; store more water on land; reduce excessive nutrient loads contributing to muck formation, plankton blooms and fish kills; restore natural water storage functions to terrestrial wetlands in the watershed; and restore water quality and more natural estuarine bottom communities. The Chief of Engineers Report and PIR for the project are currently under final review at this time. The five features recommended in the PIR are:

a. Aboveground Water Storage Reservoirs. Construction and operation of four new above-ground reservoirs, and their connecting canals, control structures, levees and pumps providing approximately 130,000 acre-feet or 44 billion gallons of water storage to capture water from the C-44, C-23, C-24, and C-25 canals of the C&SF project, reducing extreme peaks of freshwater discharge and delivery of suspended sediment and muck to the estuary.

b. Storm Water Treatment Areas (STA). Construction and operation of four new storm water treatment areas; providing 35,000 acre-feet of storage, to reduce delivery of sediment, phosphorus, and nitrogen to the estuary. Two STAs will be provided in the C-44 basin, one will be in the C-23/24 basin, and one will be in the C-25 basin.

[STAs are constructed shallow reservoirs managed to maximize the removal of nutrients via uptake by submerged and emergent aquatic plants. Natural storage and water quality treatment areas (see below) consist of lands where restoration of natural hydrologic regimes returns the historic upland/wetland storage and water quality treatment function. Natural storage and treatment areas are managed to mimic natural wetland functions.]

c. Natural Storage and Water Quality Treatment Areas and North Fork Floodplain Restoration. Restoration of approximately 90,000 acres of upland/wetland mosaic by ditch plugging, berm construction and periodic fire maintenance and exotic plant maintenance at three locations in the watershed (Palmar, Allapattah, and Cypress Creek/Trail Ridge) will provide about 30,000 acre-feet of storage, nutrient load reduction, and habitat improvement. About 3,100 acres of floodplain along the North Fork of the St. Lucie River will receive diverted freshwater flows and will link the watershed to the estuary.

d. Diversion of Existing Watershed Flows. Approximately 64,500 acre-feet will be redirected from the C-23/24 basin to the North Fork of the St. Lucie River. Residual flows from C-23 will be diverted to C-44 for discharge into the South Fork of the St. Lucie River or Lake Okeechobee. These changes will mimic historic flow patterns and reduce damage associated with high freshwater discharges to the middle estuary.

e. Muck Removal and Artificial Habitat Improvement. Approximately 7,900,000 cubic yards of muck will be removed from the North and South Forks of the St. Lucie River and the middle estuary and placed in an upland disposal site. Muck removal will create about 2,650 acres of clean substrate suitable for recolonization of bottom-dwelling organisms. Oyster shell, reef balls, and artificial submerged aquatic vegetation will be placed near the muck removal sites to create an additional 90 acres of habitat and jump start the recovery process by establishing the foundation for new oyster reefs and sea grass beds.

Expected Benefits

General

The project will lead to the recovery of the ecological, hydrologic, and water quality functions of the St. Lucie River and St. Lucie Estuary and the southern Indian River Lagoon ecosystem. The recommended plan will result in the restoration of approximately 36,000 acres of aquatic riverine and estuarine habitat in the north and south forks of the St. Lucie River, the St. Lucie Estuary, and the southern portions of the Indian River

Lagoon. This restoration will be accomplished by reducing the frequency and duration of damaging freshwater discharges to the receiving water bodies, while redirecting flows to their historic headwaters (thus restoring more natural salinity gradients in the estuaries), and by the retention of watershed flows in the natural system, thereby restoring the functions of the natural system. The recommended plan also provides for water quality treatment of captured water, benefiting both freshwater and estuarine components of the southern Indian River Lagoon natural system. The recommended plan also includes the restoration of about 92,000 acres of historic natural wetland-upland mosaic systems, resulting in the preservation, protection, and increase in the spatial extent of wetlands in the study area.

Wetland Restoration and Creation

The southern Indian River Lagoon region is one of the few areas where this wetland restoration and creation objective, as identified in the CERP study, can be reasonably met in all of South Florida, as large areas of undeveloped land still remain available. However, even in this region development pressures are beginning to be felt and the opportunity to reestablish these critical areas may soon be lost. Providing an increase in the spatial extent of wetland communities is instrumental in providing habitat restoration opportunities for fish and wildlife resources both within the South Florida ecosystem and within the St. Lucie watershed. The restoration plan for the Indian River Lagoon project will provide habitat and favorable breeding colony locations for such Everglades- associated species of birds as the federally listed endangered wood stork and snail kite, the threatened Audubon's crested Caracara, and the state listed sandhill crane. In addition, the U. S. Fish and Wildlife Service has designated the Allapattah Ranch property, part of the project's restored wetland-upland mosaic system, as recovery habitat for the critically endangered Florida panther, a species whose future survival is inextricably linked to the recovery of the Everglades ecosystem.

Additional Water for the Ecosystem

The IRL-S recommended plan offers another advantage yet to be fully utilized. Due to the substantial increase in drainage and lowering of groundwater tables in the region provided by the existing canal system and its subsequent development, there is approximately 50% more stormwater runoff than what the natural drainage system yielded to the St. Lucie River and the southern Indian River Lagoon. This volume of water, estimated at 30,000 – 60,000 acre-feet on an average annual basis, is not needed by the River or Lagoon, but could provide benefits elsewhere. By constructing the reservoirs in the recommended plan, the delivery of this water is controllable and could be directed under certain circumstances to other parts of the south Florida ecosystem via the C-44 (St. Lucie) Canal, which connects the Indian River Lagoon region to Lake Okeechobee and ultimately to the Everglades. While this water is available for other needs, there are no current plans to redirect the water to other parts of the South Florida ecosystem.

6

Economic Values and Social Well Being

The IRL-S recommended plan also improves economic values and social well being in the study area by increasing surface water supply, maintaining current levels of flood protection, and improving regional economic opportunities. This will be accomplished by providing additional water storage areas, capturing water that was being lost from the watershed, and creating an additional source for agricultural water supply. These new sources of agricultural water supply will result in a reduction in demand on the Floridian aquifer system. This shift in source will reduce operating costs required to recover water used for irrigation purposes and is expected to result in increased agricultural productivity of $6.1 million annually. Improved regional economic opportunities, including recreational opportunities, will result from the improved overall health of the southern Indian River Lagoon ecosystem, upon which the local economy is primarily dependent. This will be accomplished by reducing the frequency and duration of damaging discharges to the St. Lucie River, the St. Lucie Estuary and the Indian River Lagoon and by remediating the existing unacceptable level of muck in the estuarine system through the removal of accumulated muck sediments and by controlling future inputs of muck-forming sediments.

Summary

The IRL-S project achieves much of its ecological outputs from features controlling runoff and restoring natural areas within the IRL watershed. The only physical hydrologic connection between the IRL-S project and the larger CERP is through the C-44 canal. Historically large releases from the Lake were combined with runoff from within the basin and resulted in the degradation of the St. Lucie River and Estuary and the southern Indian River Lagoon. The Corps, its partners, and other Federal and state agencies, have determined through the best models, information, and professional expertise at their disposal that substantial restoration will occur in the study area from the IRL-S project due to the features of the IRL-S project that better manage runoff. The high flows from Lake Okeechobee and their impacts would still occur until other CERP features are implemented. The impacts of these flows, however, are significantly reduced by the IRL-S project. Specifically, the team estimated that 88% of the estuarine benefits (oyster, submerged aquatic vegetation, and benthic habitats) and 100% of the watershed benefits (wetlands and uplands habitats) estimated to occur from the implementation of the IRL-S project would still be achieved in the absence of the construction of other CERP projects. These figures are based on average annual outputs over the period of analysis that take into account which CERP projects affect Lake Okeechobee discharges to the St. Lucie estuary, when such projects are expected to be constructed, and information regarding ecological response to changes in water quality and substrate conditions. Due to the early acquisition efforts by the State of Florida, benefits to natural systems are already occurring. Under the construction schedule contained in the report, we could begin to accrue benefits for physical changes to the system by the end of 2007. The implementation of the project has been integrated into the overall CERP schedule to achieve restoration of the total ecosystem.

Project Cost

The first (construction) cost of the recommended plan, based on October 2003 price levels, is estimated to be $1,207,000,000, including $699,000,000, for real estate to be provided by the State of Florida and the SFWMD. The scale of the recommended plan features was selected based on cost effectiveness and incremental cost analysis. The recommended plan is the national ecosystem restoration plan and is justified by the restoration of approximately 54,000 watershed habitat units and approximately 4,000 estuarine habitat units. An estimated $6,100,000 in average annual national economic development benefits for agricultural water supply are incidental to the ecosystem restoration purpose of the plan.

Authorization Requirements

C-44 Basin

The CERP was authorized by Section 601 of the WRDA of 2000 with 50 percent Federal and 50 percent non-Federal cost sharing for projects and for operation, maintenance, repair, replacement, and rehabilitation (OMRR&R). Section 601(b)(2)(C)(i) of the WRDA of 2000 specifically authorized the C-44 Basin Storage Reservoir component of the recommended plan for Indian River Lagoon—South at a total cost of about $112,562,000 (October 1999 costs). Adaptive assessment of the needs of the C-44 basin area during the completion of the Project Implementation Report for Indian River Lagoon—South has resulted in substantial change to this component of the plan. Namely, the improvements focus on the need for additional water quality improvements to achieve restoration, an increase in the overall performance of the C-44 reservoir and STA to achieve better water management, the resiting of some project features to avoid cultural resources, and other changes to improve environmental benefits of the overall plan. The current C-44 basin features include a revised storage reservoir, as well as stormwater treatment and natural storage areas, which together function to meet the needs of the St. Lucie Estuary and the ecosystem at large. Due to the extensive changes in the C-44 Reservoir and the addition of the STAs and natural storage features noted above, there is a significant increase in the overall performance of the plan which justifies the increased costs. The report recommends that the C-44 Basin Storage Reservoir authorized by WRDA 2000 be deauthorized; and, that feature be replaced by the C-44 Reservoir and STA features recommended in the PIR for IRL-South.

C-23, C-24, and C-25 Basins / Other Components

The other components of the recommended plan for Indian River Lagoon—South, namely the C-23, C-24 and C-25 components, were included in the original Comprehensive Plan, but require specific authorization in accordance with Section 601(d) of WRDA 2000. The natural storage areas and muck removal components are new features that significantly enhance the overall performance of the Plan and also require specific authorization.

Cost-Sharing Requirements

In accordance with the cost-sharing requirements of Section 601(e) of the WRDA 2000, the Federal cost of the total recommended plan would be about $603,500,000 and the non-Federal cost would be $603,500,000. The estimated annual costs for OMRR&R are $6,145,000, which includes adaptive assessment and monitoring activities recommended by the reporting officers to ensure success of the project at an estimated average annual cost of $1,900,000. In accordance with Sections 601(e)(4) and 601(e)(5)(D), OMRR&R costs and adaptive assessment and monitoring costs will be shared equally between the Federal Government and the non-Federal sponsor.

Section 601(e)(5)(B) of the WRDA of 2000 authorizes credit toward the non-Federal share for non-Federal design and construction work completed during the period of design or construction, subject to the execution of the design or project cooperation agreement, and subject to a determination by the Secretary that the work is integral to the project. The Allapattah– Natural Storage and Treatment Area components of the recommended plan, with an estimated first cost of about $179,500,000 is being considered for implementation by the non-Federal sponsor, the South Florida Water Management District (SFWMD), using Wetlands Reserve Program funds provided by the U.S. Department of Agriculture under the authority of the Farmland Security and Rural Investment Act of 2002. Corps policy defers to the contributing department regarding the use of its funds as part of the local cost share. The Department of Agriculture has determined that these funds can be used as credit for another Federal project.

Also in an effort to achieve early benefits and reduce the demands on Lake Okeechobee, the Governor has identified three high priority projects for implementation, one of which is the C-44 Reservoir and STAs. The South Florida Water Management District and the State of Florida are currently pursuing a private/public partnership for design and construction of the C-44 Reservoir and STAs. I have recommended that the State be afforded credit for those portions of this work that are determined to be consistent with the recommended plan and in the Federal interest.

Project Deauthorizations

The IRL-S PIR recommends the deauthorization of several projects totaling $417,365,000, including the C-44 storage reservoir identified in the Comprehensive Review Study authorized for construction in WRDA 2000 at an updated October 2003 cost of $131,528,000; and the Martin County irrigation, flood control and backflow projects authorized by the Flood Control Act of 1968, totaling $285,837,000, which have not been constructed and are not included in the IRL-S recommended plan.

PIR Status

I signed the final PIR on March 24, 2004 and the South Atlantic Division Commander issued the Division Engineer's Public Notice on completion of the PIR on March 31, 2004. The Indian River Lagoon – South PIR is currently under final policy review at the Corps of Engineers Headquarters. On June 7, 2004, the mandatory 30-day state and agency review was completed and the scheduled date for signing of the Chief of Engineer's report by 30 July 2004 at which time the Chief's recommendation(s) will be transmitted to the Assistant Secretary of the Army (Civil Works) for review and approval within the Administration.

Picayune Strand Ecosystem Restoration

Introduction

The Picayune Strand ecosystem restoration proposal is another effort we are conducting in partnership with the South Florida Water Management District and many other groups. The Picayune Strand restoration encompasses an area located in southwestern Collier County, Florida. It is located southwest of the Florida Panther National Wildlife Refuge, north of the Ten Thousand Islands National Wildlife Refuge, east of the South Belle Meade State Conservation and Recreation Lands (CARL) project, west of Fakahatchee Strand State Preserve, and northeast of Collier-Seminole State Park. The South Belle Meade CARL project, known simply as "Belle Meade", and the Southern Golden Gate Estates (SGGE) area have been combined by the State of Florida to form the Picayune Strand State Forest. The project when implemented would remove the infrastructure of a 55,247-acre subdivision, formerly known as SGGE, and restore its pre-drainage hydrology and ecology providing an increase of over 36,000 acres of wetlands to this important region of the South Florida ecosystem.

Background

Golden Gate Estates (GGE) was planned as an extensive residential subdivision by Gulf American Corporation (GAC) beginning in the 1950s. At that time, there were no state or Federal laws setting drainage standards or regulating the development of wetlands. GAC constructed 290 miles of shell-rock roads and 49 miles of canals in the 1960s and early 1970s, but the residential development failed before many of the planned houses were built. These roads and four large canals have over-drained the area, resulting in the reduction of aquifer recharge, greatly increased freshwater point source discharges to the receiving estuaries to the south, invasion of upland vegetation, loss of ecological connectivity and associated habitat, and increased frequency of forest fires. The construction of Interstate 75, also known as Alligator Alley, split the GGE subdivision in half by forming Northern Golden Gate Estates, which is largely developed, and Southern Golden Gate Estates that encompasses 94 square miles.

Problems

This development effort dramatically changed the natural landscape. The water table dropped several feet, turning what was once a healthy cypress-dotted wetland into a distressed system that became a target for invasive nuisance plants. These alterations to the natural system also resulted in an increase in wildfires, both in frequency and intensity. Runoff that once flowed in a broad shallow sheet to the coastal estuary was now being funneled into the Faka Union Canal system. This concentrated discharge damaged vast beds of sea grass deemed vital to sustaining coastal fisheries. In addition, the discharge negatively impacted the salinity of the estuary and degraded its overall water quality. Drinking-water well fields have also become vulnerable to saltwater intrusion. In 1975, Collier County commissioned the first study to explore alternatives that would reverse the impacts of these development activities. Today, the South Florida Water Management District and the U.S. Army Corps of Engineers, along with dozens of local, state, and Federal agencies are seeking ways to correct the damage. Restoring a natural water regimen in SGGE is an important feature of the CERP.

Elements of the Proposed Plan

The proposed plan, known as Alternative 3D in the District Engineer's Draft PIR, has many similarities to the conceptual plan described in the CERP. The concept was to construct a series of pump stations and spreader channels to slow water flowing through existing canals and distribute it across the landscape. This would serve to restore the wetland communities in SGGE and improve the timing and volume of fresh water flows to the downstream estuaries of the Ten Thousand Islands region.

- Construct Spreader Channels and Pump Stations – Spreader channels would be constructed on the Miller, Faka Union, and Merritt Canals to redirect the water from flowing southward within the canal to east and west directions perpendicular to the canals. As the water rises with the spreader channels, the water would overtop the southern, downstream bank of the channel and then flow overland southward as sheetflow. The pump stations would ensure that the water would continue to flow southward and would prevent water from flowing back (north) to the Northern Golden Gate Estates (NGGE) community. The capacities of the pump stations, 1000 cubic feet per second (cfs) at the Miller Canal, 2000 cfs at the Faka Union Canal, and 800 cfs at the Merritt Canal, were designed to be large enough so that the spreader channels and other construction features would not reduce the drainage in NGGE provided by the canals. A 50 cfs pump station would be constructed for interior-drainage at the private lands levee system.

- Degrade Roads and Fill Ditches – 260 of the 279 miles of roads in SGGE would be graded to the same level as the surrounding ground. Approximately 227 miles of these degraded roads would be abandoned and allowed to revegetate. Degrading the roads would greatly increase sheet flow across the landscape.

- Construct Canal Plugs – 83 canal plugs would be placed within all four of the major canals in SGGE. Plugs would be placed south of the pump stations in the Miller, Faka Union, and Merritt Canals, and along the entire length of the Prairie Canal, a project component currently being constructed by the South Florida Water Management District. These plugs would prevent the canals from transporting water southward into the estuaries.

- Flood Protection Levees – A total of five levee systems would be constructed around certain developed areas to prevent these areas from being flooded as a result of this project. The levees would be constructed around the 6L agricultural area located at the western edge of the restored area, three Port of the Islands developments located at the southern end of the restored area, and the private lands residential area in northern Belle Meade at the northwest edge of the restored area.

- Culverts – Culverts would be placed in each levee system to allow for interior drainage. Additional culverts would be placed under U.S. 41 (Tamiami Trail) to allow water flow southward across the landscape into the Ten Thousand Islands estuary region.

Project Cost

The cost of construction for the proposed plan is estimated to be $362,612,000, including $250,408,000 for real estate, for which the State of Florida has nearly completed acquisition. The non-Federal sponsor, the South Florida Water Management District, shall be responsible for 50 percent of the total cost of the plan and the sponsor will be afforded credit towards the cost of the project for the costs of real estate acquisition. Annual operation and maintenance is estimated to be $2,129,000. The South Florida Water Management District shall also be responsible for 50 percent of the cost of operation, maintenance, repair, replacements and rehabilitation activities. The construction cost estimates for the plan reflect October 2003 price levels and were developed using standardized policies and procedures.

Major Effects

The proposed plan would restore the SGGE area and adjacent affected public lands to as close to a pre-drainage pre-development condition as possible. This goal will be accomplished by reestablishing a more natural hydrology to the landscape where surface water sheet flow has been intercepted by 279 miles of roads and captured in 48 miles of canals. The plan would restore over 55,000 acres of land in SGGE and increase over 36,200 acres of wetland vegetation communities (cypress, marsh, wet prairie, and wet pine). Over-drainage of the SGGE landscape and surrounding public land would be halted. Plugging of the canals and degrading of the roads would lead to more natural hydrological patterns, in which restored historic plant communities may again provide habitat for native fish and wildlife. Present day freshwater surge discharges through the Faka Union Canal system would be replaced by more natural

slow shallow sheetflow across a broad front that empties into the estuaries and bays of the Ten Thousand Islands region.

The Federal and State preserve and parks surrounding SGGE would be linked and enhanced by the restored conditions within SGGE. The combined natural area would be able to function as one regional ecosystem. Currently, SGGE creates drainage and fire impacts to adjacent lands and acts as a barrier to movements and growth of populations of plants and animals between adjacent lands.

Status

The Jacksonville District completed a draft Project Implementation Report (PIR) that includes our proposal for restoration in May 2004. The public comment period closed July 13, 2004 and we are now in the process of evaluating and analyzing the comments received. The tentative schedule for completing the final PIR is September 21, 2004, at which time the report will be transmitted to the Headquarters, U.S. Army Corps of Engineers for Washington level policy review. We are scheduled to complete the Chief of Engineers by December 31, 2004. The Chief's recommendation will be transmitted to ASA(CW) for review and approval within the Administration.

Conclusion

The Army and this Administration are committed to saving the Everglades ecosystem, one of America's most precious natural wonders. Maintaining and restoring one of the most diverse and thriving ecosystems in the world is a daunting challenge in and of itself, but when that ecosystem must reside next door to a diverse and thriving human population the complexity of the challenge is compounded exponentially.

Both the Indian River Lagoon – South project and Picayune Strand restoration proposal represent a major step in the overall effort to restore this nationally significant ecosystem. The plans that we have developed enjoy strong support from state and local governments, as well as the business and environmental communities. We have had an independent science team review the Indian River Lagoon South report and its plan and they have concurred in its findings.

Mr. Chairman, that concludes my statement. Again, I appreciate the opportunity to testify today before the Committee. I would be pleased to answer any questions you or other Members of the Committee may have.

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

SEP 20 2004

RECEIVED
SEP 29 2004
Hon. John J. Duncan, Jr.
Washington, DC

South Atlantic Division
Regional Integration Team

Honorable John J. Duncan, Jr.
Chairman
Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
Washington, D.C. 20515

Dear Mr. Chairman:

This is in response to your letter dated July 29, 2004, which transmitted questions for the record on the July 22, 2004 Subcommittee on Water Resources and Environment hearing on the Comprehensive Everglades Restoration Plan (CERP) – The First Major Projects.

Attached are responses to the questions you provided. The Corps continues to make progress on the first two CERP projects identified for potential authorization by the Congress in a Water Resources Development Bill of 2004. On September 8, 2004, my report on Indian River Lagoon – South was transmitted to the Assistant Secretary of the Army for Civil Works for review and approval within the Administration. In addition, the Jacksonville District has nearly completed the Picayune Strand Restoration - Project Implementation Report (PIR). The South Atlantic Division Commander's public notice announcing the completion of this PIR is scheduled for September 24, 2004, at which time the PIR will be transmitted for final policy review within the Corps Headquarters.

We will continue to keep you advised on the progress of these projects. If you have any questions, please feel free to contact me.

Sincerely,

Atch

Carl A. Strock
Lieutenant General, U.S. Army
Commanding

Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
U.S. House of Representatives

Hearing
"Comprehensive Everglades Restoration Plan – The First Major Projects"
July 22, 2004

Question # 1

At the hearing, you admitted there is no project in the Comprehensive Everglades Restoration Plan that would move water from the proposed Indian River Lagoon reservoirs to the Everglades. Given that fact, how can you assert that the Indian River Lagoon project provided the greatest benefit to the Everglades and therefore should be authorized first?

Response: The decision to move forward with this project at this time is not only one of benefits to the south Florida ecosystem but also one of opportunity. Authorization of the project provides the opportunity to marshal the strong support provided by a diversity of public and private groups actively engaged in this effort, including environmental groups, local government, and many business and recreational concerns, as well as the opportunity to acquire currently undeveloped property for the project before the lands escalates to a prohibitive cost.

The Indian River Lagoon - South (IRL-S) recommended plan provides significant ecosystem restoration benefits to the south Florida ecosystem. The plan provides the next opportunity to capture, store and treat water that will be available for use in the overall ecosystem restoration effort. Currently when lake levels are low, water moves from the C-44 Canal into Lake Okeechobee and this practice will continue after implementation of the IRL-S plan. However, implementation of the project will help reduce peak stages in Lake Okeechobee and thus reduce damaging discharges to the Water Conservation Areas and the Everglades to the south. Water flowing through the stormwater treatment areas (STAs) will be cleansed and water quality flowing back to the lake will much higher, thus improving the ecological conditions in the lake. Following the implementation of the North Palm Beach and Everglades Agricultural Area Comprehensive Everglades Restoration Plan (CERP) projects, additional capability will exist to move even more water stored and treated by IRL-S components south through Lake Okeechobee or other canal systems to provide additional benefits to the southern portions of the ecosystem.

Further, the IRL-S project area provides one of the few opportunities that exist to expand the spatial extent of wetlands in the south Florida ecosystem, which was one of the key defining characteristics of the historic Everglades ecosystem. The plan's identified Natural Storage Areas and STAs lie in an area already experiencing the pressures of land development that are encroaching from south-Florida. And without authorization, the Corps and the South Florida Water Management District would be unable to prevent upland development of project sites, thus resulting in increased costs later or forgone opportunities.

The Indian River Lagoon (IRL) is identified as the most biologically diverse estuarine system in all of North America, and is an area in need of the most immediate attention. The project will reduce the damaging ecological effects of watershed runoff; reduce high peak discharges and nutrient loads to the St. Lucie Estuary, provide water quality benefits to control salinity; and reduce pesticides and other pollutants presently discharged to the estuary.

Finally, the project will provide water supply for agriculture to offset reliance on the Floridian Aquifer during the dry season and, therein, decrease competition on increasingly scarce water resources, while improving agricultural productivity.

Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
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Hearing
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Question # 2

The pilot projects that were authorized in the Water Resources Development Act of 2000 would demonstrate the feasibility of Aquifer Storage and Recovery. Controlling water flows to the Everglades depends on the success of these pilot projects. Do you believe it is prudent to proceed with major construction projects prior to completing those pilot projects? When will the results of the Aquifer Storage and Recovery pilot projects be known?

Response: Controlling water flows within the greater South Florida ecosystem and the Everglades depends on the implementation of water control features that are capable of storing large amounts of water to ensure that water is available for the natural system during the dry seasons. Aquifer Storage and Recovery (ASR) is only one means to achieve this storage. Storage is also provided under the CERP through surface, in-ground reservoirs and STAs. Construction of these other, more traditional, storage features will be required regardless of what may be learned from the pilot projects, and these reservoirs and STAs will begin to realize benefits rapidly after their construction.

Projects, like ASR, have greater uncertainties associated with them and the pilot projects will provide information to resolve uncertainties in the use of this technology to achieve the goals of CERP before full-scale implementation of ASR. The FY 05 President's Budget includes funding to initiate construction of the ASR pilot projects. Concurrent with the ASR pilot projects, we are also undertaking studies to determine alternative storage options if ASR does not perform as well as expected. Meanwhile, the sooner we can provide more storage to the system the greater the flexibility that will exist in managing the water in the system and providing improved benefits to the natural system.

Question # 3

For estuary projects, the Corps of Engineers and other Federal agencies have put together a "National Estuary Habitat Restoration Strategy," that is supposed to help meet the goal of restoring 1 million acres of habitat by 2010. Does the Indian River Lagoon project follow the National Strategy? Has the National Estuary Habitat Restoration Council, which is chaired by the Corps, determined the project is a priority?

Response: All features of the proposed IRL-S plan are consistent with the National Estuary Habitat Restoration Strategy (published in the Federal Register on December 3, 2002). Specifically, the Strategy states that it "will be implemented in a manner consistent with estuary management or habitat restoration plans." An estuary habitat restoration plan is defined in the Estuary Restoration Act as "... any Federal or State plan for restoration of degraded estuary habitat that was developed with substantial participation of appropriate public and private stakeholders." Not only was the IRL-S plan developed in this manner, the IRL plan is also compatible with the Comprehensive Conservation and Management Plan (CCMP) developed under EPA's National Estuary Program for IRL, which was developed with substantial public and stakeholder involvement. While the IRL-S plan has not been formally presented to the National Estuary Habitat Restoration Council for a determination regarding its priority and would not normally be ranked since it is not being implemented under the National Estuary Program, all of the agencies represented on the Council have individually reviewed the PIR and indicated strong support for the IRL-S plan.

Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
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Hearing
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July 22, 2004

Question # 4

The Corps recently released its draft Master Project Implementation Schedule. Are portions of the Indian River Lagoon project not scheduled for construction until 2015 or 2025? If so, why is the Corps recommending that we authorize the Indian River Lagoon Project now? What happens if we authorize only the C-44 reservoir now? Can this project component stand on its own merits?

Response**:** The Corps is currently scheduled to release the draft Master Implementation Sequencing Plan (MISP) in November 2004 for formal public and agency review and then finalize by December 2004. When completed, the MISP will reflect, through "Banding" of groups of projects, construction completion periods for all CERP projects and their associated components and is based upon an assumed $200M annual Federal funding stream cap. Schedules also assume that engineering and design and real estate acquisition activities will be completed prior to construction initiation. Earlier versions of the MISP effort identified components of the IRL-S plan completing construction after 2015. As the draft MISP document continues to be updated, refinement of overall CERP schedule has identified additional opportunities for the IRL-S plan to meet the goals identified in the PIR and the team putting together the MISP continues to make refinements in the schedule.

The IRL-S plan is a key component of the overall restoration effort for the south Florida ecosystem and provides a major first step in capturing water needed for restoration of the South Florida ecosystem and the Lagoon. While some components of the overall project may have completion dates which are set in the future, it is important to note that the overall project and most of the benefits will be realized within a short period. It would disrupt implementation of the project and would be inefficient to ask Congress to authorize an incomplete project and then return for an additional request to complete the task originally envisioned. The sequencing of CERP work will remain true to the priorities set in its development. This may mean, however, that certain components of some projects will be finished after others. We feel that authorization of the project as presented is the most efficient way to organize implementation of the project and allow the Corps the ability to work quickly when resources become available. While the C-44 reservoir component is important, it alone would not result in significant improvements to the overall ecosystem, the St. Lucie Estuary, or Indian River Lagoon. While providing this additional storage capacity in the system will have some positive impact on the salinity of the estuary it will not "fix" the salinity problem. Additionally, the PIR identified other stressors to the ecosystem that the reservoir alone could not address. For example, the reservoir would not remove significant amounts of the sediment that currently arise from within the watershed and is carried to the estuary, nor would it be able to clean up other pollutants to meet the needs of the system. In addition, the project area provides one of the few opportunities that exist to expand the number of short hydroperiod wetlands, which was one of the key defining characteristics of the historic Everglades ecosystem.

Finally, the Corps and the South Florida Water Management District would be unable to prevent upland development of project sites in an area already experiencing the pressures of land development that are encroaching from south-Florida, thus resulting in increased costs later or forgone opportunities. The Corps Regulatory Program, which enforces Section 404 of the Clean Water Act, and the state's counterpart, are unable to deny development permits based solely upon plans for projects that have not yet been authorized (note that applications have already been filed for permits on development actions

within identified project site footprints). Further, without a project authorization the Corps cannot engage in acquisition of lands for a project, while the state's abilities are hampered. Currently, the state continues to operate at risk of not receiving credit for the purchases they are able to make, but they may not be willing to continue if authorization is not provided.

Question # 5

According to the draft Master Project Implementation Schedule, many of the components of the Indian River Lagoon Project for which the Corps is seeking authorization would not be built for another 15 or 20 years. According to your schedule what components would actually be constructed by 2010?

Response: According to the current draft schedule, the C-23/24 STA, C-23/24 North Reservoir and South Reservoir, the C-44 Reservoir and STAs, and the Allapattah Natural Storage Area will be completed in the band of projects to be completed by 2010.

Question # 6

Even with the Indian River Lagoon Project features in place, won't there still be harmful discharges of sediment and poor water quality into the lagoon as a result of overflows from Lake Okeechobee? What will be the impacts of these remaining harmful discharges into the lagoon?

Response: The St. Lucie Estuary and the Southern Indian River Lagoon is adversely impacted by large flood control discharges from Lake Okeechobee through the C-44 Canal and by flows generated from within the IRL watershed. On average, damaging releases from Lake Okeechobee occur once every 5 years. In contrast, the IRL watershed produces more frequent discharges that adversely impact the estuary every year. This effect was analyzed by the team, which determined that 88% of the estuarine benefits would be achieved without the implementation of other CERP projects that would help control the Lake releases.

Question # 7

What additional Comprehensive Everglades Restoration Plan Projects are necessary to control Lake Okeechobee discharges? Do we know yet what those projects will cost? What is the schedule for completion?

Response: Regulation of flows through Lake Okeechobee is perhaps the single most complex task in the overall CERP. The other CERP projects that will help control Lake Okeechobee flood control discharges include the EAA Storage Reservoir (authorized in WRDA 2000), Taylor Creek / Nubbin Slough Reservoir (authorized in WRDA 2000), North Lake Okeechobee Storage Reservoir, Lake Okeechobee Aquifer Storage and Recovery, and the C-43 Storage Reservoir. The Corps is currently scheduled to release the draft MISP in November 2004 for formal public and agency review and then finalize by December 2004. As the draft MISP document continues to be updated, and the team putting together the MISP continues to make refinements in the schedule. While PIRs for these projects are yet to be completed, costs outlined in the 1999 Comprehensive Restudy Report suggest that the estimated total cost for these projects is approximately $2.2 billion.

Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
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Question # 8

The original cost estimate of the Indian River Lagoon Project was $936 million. It is now being recommended at $1.210 billion. Can you explain the increase? Are all of the remaining projects going to go up in cost?

Response: The Army Corps of Engineers and its partners continue to aggressively monitor and manage total CERP Program costs with a view toward minimizing Program cost increases. While some projects have actually decreased in cost, the IRL-S plan costs have increased approximately $275 million as a result of inflation, the increased cost of land to be acquired and features added to improve project performance. However, implementation of the IRL-S plan would also allow other authorized but not completed projects elements, costing about $205 million, to be considered for deauthorization. These added features are consistent with Federal efforts to seek continuous improvements to the Comprehensive Plan, based upon new information, changed or unforeseen circumstances, new modeling or information developed through adaptive assessment principles. Features added include Stormwater Treatment Areas to improve the overall quality of the water, Natural Storage Areas to increase the spatial extent of the natural wetland areas, removal of almost 8 million cubic yards of muck and material that is having a very detrimental ecological effect on the Lagoon; and, creation of artificial habitat within the Lagoon to jump-start the recovery effort. The additional features have dramatically increased the overall performance of the plan and achieved a much greater level of restoration at a net increase of about $70 million. The benefits realized by the project modifications significantly outweigh the increase in costs.

Question # 9

What economic benefits to the nation would come from building these initial (Southern Golden Gate Estates, Indian River Lagoon) projects?

Response: The Picayune Strand (formerly Southern Golden Gate Estates) and Indian River Lagoon plans were formulated for environmental restoration and National Ecosystem Restoration (NER) benefits. Primary benefits from these projects are environmental restoration benefits. The National Economic Development (NED) benefits from both projects are incidental benefits. The incidental economic benefits from Indian River Lagoon are agricultural water supply. These agricultural water supply benefits are expected to exceed $6,100,000 annually. The restoration plan for Indian River Lagoon will also improve the fisheries in St. Lucie Estuary, which may create economic benefits from changes in commercial and recreational fisheries and tourism. Although the Project Implementation Report for Picayune Strand is not yet complete, there may be minor incidental flood control benefits realized in the project area, as well as improvements to the fisheries of the 10,000 Islands estuary.

Question # 10

In developing the recommend plan for Indian River Lagoon South, what assumptions were made about the management actions by state and local governments to reduce discharges of pollutants to the estuary? Are there any required nonfederal actions or improvements as a condition to federal

implementation of the Indian River Lagoon project? Does the plan fund any activities that the local governments are responsible for under section 402 (p) of the Clean Water Act?

Response: There are several ongoing watershed programs being conducted by state and local governments in the IRL area that are expected to beneficially affect water quality conditions in the St. Lucie River, St. Lucie Estuary and the IRL-S. These programs include, but are not limited to, the IRL Surface Water Improvement and Management Plan, the IRL National Estuary Program, and Best Management Practices programs conducted by SFWMD and local governments. The assumptions made were that these watershed management programs would continue and water quality in the IRL area is expected to improve slightly in the future. These programs are effective on a small scale, but would not begin to mitigate the effects of Central and Southern Florida project canal discharges to the water bodies in the area.

There are no non-Federal actions or improvements required as a condition for Federal implementation of the IRL-S plan.

The IRL-S plan will not fund any activities that local governments are responsible for under section 402(p) of the Clean Water Act. The water quality treatment features included in the IRL-S plan are not part of the State of Florida's - Everglades Construction Project and are essential to Everglades restoration consistent with Section 528(e)(2)(B) of WRDA 1996 and are eligible for 50-50 cost sharing.

Question # 11

How does the Corps plan to address the issues or concerns identified in the Independent Scientific Review panel's report for the Indian River Lagoon project?

Response: In most instances concerning Independent Scientific Review Panel recommendations the panel suggested that these recommendations be considered specifically during the Preconstruction Engineering and Design (PED) phase of project implementation. Engineering, ecological, and water quality modeling, general engineering, and hydrogeology will be addressed during PED. Project design may be refined based on modeling results as well as results gleaned from the Restoration, Coordination, and Verification Team's ongoing adaptive management process and monitoring programs. The panel's requests for clarification in such areas as comprehensive adaptive management, general ecology, and plan formulation were addressed in the U. S. Army Corps of Engineers Jacksonville District's "Indian River Lagoon – South Project Implementation Report, Response to Independent Scientific Review Written Assessment," dated April 28, 2004.

Question # 12

The Corps received a letter from the Fish and Wildlife Service dated May 6, 2004, that stated that recent model results indicated several shortfalls in the Comprehensive Everglades Restoration Plan performance. Could you explain what those shortfalls are and how the Corps is addressing them?

Response: The letter dated May 6, 2004 was in response to the preliminary draft Initial CERP Update (ICU) model run. The purpose of the ICU is to document the update of the model used for the Restudy.

Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure
U.S. House of Representatives

Hearing
"Comprehensive Everglades Restoration Plan – The First Major Projects"
July 22, 2004

The model revisions are being made to respond to new information gained since the Comprehensive Plan feasibility report was released (July 1999). Since that time, work has continued on several fronts relating to the implementation of the Plan. Performance measures and indicator regions for the natural system, which are used to predict plan performance, have been revised. Upgrades have been made and new data has been added to the South Florida Water Management Model (SFWMM). The model revision is ongoing and the issues raised in the letter from Fish and Wildlife Service are being evaluated by an interagency team to improve the model. Once the model refinement is complete and the team is confident it will provide reliable results, any "shortfalls" identified in performance of the Plan will be addressed, as appropriate, through operational refinements, individual component refinements through the PIRs, or through a Comprehensive Plan Modification Report as prescribed in the Programmatic Regulations.

STATEMENT OF HON. JOHN J. DUNCAN, JR.

CHAIRMAN, WATER RESOURCES AND ENVIRONMENT SUBCOMMITTEE
HEARING ON
"Comprehensive Everglades Restoration Plan – the First Major Projects"
July 22, 2004

The Water Resources Development Act of 2000 authorized the Comprehensive Everglades Restoration Plan to be the framework for conserving and redistributing water in south Florida. The principal goal of this effort is to restore water to the Everglades, but at the same time recognizing the water supply needs of agricultural and urban areas.

In 2000, Congress authorized construction of critical and pilot Everglades projects totaling $1.4 billion. For additional Everglades projects, the Corps is required to complete more detailed studies and to send a Project Implementation Report to Congress. Today we are reviewing the first two of these Project Implementation Reports that the Corps has released – the Indian River Lagoon project and the Southern Golden Gate Estates project, also known as the Picayune Strand project. These are the first of what may ultimately be more than 60 projects that the Corps will recommend for authorization in the form of Project Implementation Reports.

The Indian River Lagoon is an estuary east of Lake Okeechobee that has been degraded by poor water quality and sediment that is flushed into the lagoon from existing drainage canals, including discharges from Lake Okeechobee. The Indian River Lagoon project consists of four reservoirs and stormwater water treatment areas that will capture some of the harmful runoff. The project will hold the water and treat it by removing nutrients before releasing it in a controlled manner into the lagoon. In addition, the report recommends dredging 8 million cubic yards of muck from the lagoon to restore habitat for sea grasses and oysters. The cost of the Indian River Lagoon project is estimated at $1.2 billion.

The Golden Gate Estates project would restore the natural landscape features in an area in the western Everglades by filling in canals and removing roads that were once a part of a planned real estate development. This project will restore the natural flow of water through this part of the Everglades and improve the timing and quality of water entering the Florida Bay. The Golden Gate Estates project would cost $363 million.

I am concerned about priorities of projects both on a national scale and within the Everglades itself. There are many important estuaries in need of restoration – San Francisco Bay, Chesapeake Bay, Coastal Louisiana, Florida Bay, and Biscayne Bay to name a few. When we are considering the high cost of the Indian River Lagoon project and other projects it is reasonable to consider whether the Indian River Lagoon is the best place to invest limited funds to improve the Nation's estuaries.

To provide some perspective, I note that the Chesapeake Bay Foundation reports that for $600 million, which amounts to half of the Indian River Lagoon project costs, one could modernize all the wastewater treatment plants in Virginia that send pollution to the Chesapeake Bay.

We have had a series of hearings on some very expensive projects that the Corps is recommending this year. Congress has to recognize that authorizing and funding these major projects will impact how quickly other Corps projects are done. And even if we focus on Everglades restoration alone, we have to recognize that doing expensive projects early in the process will effect how quickly other Everglades projects can be implemented. Looking at the full range of Everglades projects under development, I have to ask the question whether the Indian River Lagoon project should be implemented first.

The Indian River Lagoon project is the first major Everglades project presented to Congress primarily because it got an early start as a stand-alone project. It was wrapped into the Everglades effort in the 2000 authorization.

I understand the feelings of the representatives of Martin County, who are testifying today. They desperately want to see the lagoon restored. This estuary is very important both economically and aesthetically to the people of that region. They believe that this project will stop the harmful discharges of freshwater and sediment into the lagoon. In fact, it won't.

While the project will provide some improvements, there will still be occasional harmful discharges from Lake Okeechobee that will send more bad water and muck into the lagoon. This could undo the restoration that we are spending $1.2 billion to achieve.

I question why we would dredge 8 million cubic yards of muck out of the lagoon when more muck will continue to be deposited through Lake Okeechobee discharges. Don't we need to fix Lake Okeechobee first?

Recovery of the lagoon is not going to be possible until discharges from Lake Okeechobee can be controlled. Projects that will do that are not yet designed and some depend on technology known as aquifer storage and recovery that has not yet been tested on a large scale in this region. There are pilot projects underway to determine whether aquifer storage and recovery will work in Florida. If the technology is successful, projects that would control Lake Okeechobee water levels would be constructed in 2020 or later. If the pilot projects show that the aquifer storage and recover technology does not work, then the Corps may have to go back to the drawing board, and many Everglades projects under consideration will have to be redesigned.

Some will point out that the Indian River Lagoon project will provide excess water that can be sent south to the Everglades. But, while plans may be developed to eventually send some of the excess water south, the project before us does not provide any way to do that. That is a concept for a future project.

Do we want to tie up money in pursuit of a project that will not provide complete restoration of the lagoon and in fact may delay the construction of projects that would control damaging flows from Lake Okeechobee by tying up $1.2 billion in funding?

That does not make sense to me, and in fact I note that in its draft Master Implementation Sequencing Plan, the Corps is proposing to push construction of all but one of the components of the Indian River Lagoon project out to 2015 or later. This will conserve funds and allow for

priority projects, including aquifer storage and recovery pilot projects, to go forward and allow time for appropriate Lake Okeechobee controls to be developed. This seems to be a logical sequence.

I also note that the Corps' draft Master Implementation Sequencing Plan proposes that the Southern Golden Gate Estates be constructed early in the Everglades restoration process. This project directly benefits the Everglades.

I am not saying that the Indian River Lagoon project is not worthwhile, but I do think it is important for the Corps to take a logical, system-wide approach, as they are proposing in the draft sequencing plan.

Finally, while I have some concerns, I do want to commend the Corps of Engineers, the State of Florida, and their many partners in this Everglades restoration effort. This is a major engineering undertaking in a complex hydrologic environment. Their efforts are made more challenging by the need to strike a public interest balance among the many diverse demands for water.

CONGRESSMAN MARK FOLEY

Statement for the
Subcommittee on Water Resources and Environment
Of House Transportation and Infrastructure Committee
Oversight Hearing on the Comprehensive Everglades Restoration Plan:
The First Major Projects

July 22, 2004

Mr. Chairman and Members of the Subcommittee, I would like to thank you for holding this hearing on the Comprehensive Everglades Restoration Plan. I believe it is extremely important that we do this as we move closer with the implementation of the first initial projects like the one in my district, Indian River Lagoon-South and others, such as Southern Golden Gates Estates Restoration in Collier County.

When Congress passed the Comprehensive Everglades Restoration Plan (CERP), we reaffirmed the nation's commitment to America's most imperiled natural treasure. For almost 45 years, there has been a steady stream of clear and compelling scientific data detailing the perilous state of the Everglades—unnatural levels of freshwater in our estuaries, lesions on our fish, deposits of muck and phosphorous in our lakes and canals and the decline of wading birds.

CERP represented an historic partnership between all stakeholders. Agricultural interests, the Administration, utilities, the state of Florida, Indian Tribes, and environmental groups came together in an unprecedented show of cooperation to develop a plan that will protect and preserve our ecosystem. It built upon the initial commitment we as a Congress made, at my request, to provide $200 million in federal funds for Florida's Everglades restoration efforts back in the 1996 Farm Bill.

Mr. Chairman, we are now at a crossroad and timing is critical. The Indian River Lagoon Plan-South (IRL) is one of the first significant elements of CERP and it is responsible for critically addressing environmental abuses visited on the St. Lucie River, Indian River Lagoon and Lake Okeechobee by the old Central and Southern Florida Flood Control Project.

The Indian River Lagoon is a 156-mile long estuary located at the mouth of the St. Lucie River in Martin County, Florida, which is part of my congressional district. It is home to more than 4,300 species of plants and animals, and supports an annual economic contribution of more than $730 million.

My constituents in Martin County have been extremely instrumental in their support for the project. Not only did they organize numerous rallies and write thousands of support letters but they also voted for a three-year, one-cent sales tax to contribute over $50 million in revenue for the IRL plan effort.

The U.S. Army Corps of Engineers, Jacksonville District, did a tremendous job working in conjunction with its partner, the South Florida Water Management District, finishing the final Project Implementation Report for the IRL this past spring. I would like to commend Col. Carpenter and Henry Dean, the executive director of the South Florida Water Management District for their and their staff's work.

As we wait for a favorable report by the Chief of Engineers of the Corps, Lieutenant General Strock, and for a Water Resources Development Act, I introduced H.R. 4344, which would authorize both the Indian River Lagoon Plan-South and the Southern Golden Gates Estates Restoration. It is the companion bill to S. 2209, introduced by Senator Bob Graham. I am grateful to my colleagues, Alcee L. Hastings and Mario Diaz-Balart for co-sponsoring this legislation.

Mr. Chairman, we cannot wait further for authorization of these projects. It needs to occur this year. The success of CERP depends upon it and I believe we should not falter in our commitment to it. I would implore your panel to work with the Senate to ensure this project is authorized this year so we can secure the funds needed to begin it. Thank you.

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Testimony to the
Subcommittee on Water Resources and Environment
House Transportation and Infrastructure Committee
Comprehensive Everglades Restoration Plan – The First Major Projects
July 22, 2004

Mr. Chairman, Ranking Member Costello, members of the Subcommittee, on behalf of Audubon of Florida, a state office of the National Audubon Society, thank you for the opportunity to present our views regarding the Comprehensive Everglades Restoration Plan – The First Major Projects. Audubon has had a presence in the Everglades for more than a century, and has been actively engaged on the science and policy of Everglades restoration from more than a decade.

Florida's Congressional delegation merits appreciation for its commitment to Everglades restoration. We recognize Congressman Mario Diaz-Balart for his leadership and commitment, as well as Congressman Mark Foley and Congressman Alcee Hastings. We want to especially acknowledge Congressman E. Clay Shaw's vision, courage, and determination in championing the historic legislation designed to restore the South Florida ecosystem. Finally, we are ever grateful to Senator Bob Graham for his enduring leadership on the Everglades.

In the Water Resources Development Act (WRDA) of 2000, Congress directed the U.S. Army Corps of Engineers (Corps) to restore the South Florida ecosystem[1] using the Comprehensive Everglades Restoration Plan (CERP) as the framework, beginning with an initial suite of project authorizations. The purpose of our testimony is to support authorization of the Indian River Lagoon – South and the Picayune Strand (formerly Southern Golden Gate) Restoration Projects, critical components of the Comprehensive Everglades Restoration Plan (CERP), as the second suite of authorizations.

These projects are needed to fulfill the Congressional directive to "restore, preserve, and protect the South Florida ecosystem while providing for other water-related needs of the region."[2] We note that the measure of success of Everglades restoration is bringing back abundant wildlife, that economic prosperity and quality of life depend on sustainable ecosystems, and that partnerships between branches of government and the inclusion of stakeholders are necessary for success. Both the Indian River Lagoon and Picayune Strand Restoration CERP Projects demonstrate each of these tenets.

Wildlife & Natural Habitat

It is often noted that the decline of the once widespread flocks of wading birds was the first sign that the Everglades ecosystem was threatened. Birdlife still serves as an indicator of ecological health, and a principal measure of success for the South Florida/Everglades system is the return of abundant bird populations. The South Florida Greater Everglades, a subtropical ecosystem, has the highest biological diversity value of any similarly sized area in the continental United States.

[1] Congress defined "South Florida Ecosystem" as "consisting of the land and water within the boundary of the South Florida Water Management District" and "the contiguous near-shore coastal water of South Florida."
[2] WRDA 2000.

Recognized as a wetland of international significance, the Everglades is home to some of the world's most distinctive plants and animals including 69 federally listed endangered or threatened species and 29 candidate species. It is also a flyway for millions of migratory songbirds.

Everglades restoration will repair much of the damage from drainage and development, bringing back the wading birds that once filled the South Florida landscape and restoring hundreds of thousands of acres of wetlands and estuarine habitat. Restoration projects will benefit federal and Florida conservation lands totaling nearly 3.5 million acres and contribute to South Florida's ecosystem-based economy.

Restoration promises to recreate, maximize, and protect a healthy, self-sustaining mosaic of ecological communities that mirrors the unique diversity of the historic Everglades ecosystem. This involves protecting and expanding the current spatial extent of South Florida's natural ecosystems, restoring lost habitat types, reestablishing connections among ecological communities to reduce fragmentation, and creating buffer zones between developed and natural areas. Restoration of land to more natural conditions will be accomplished by reestablishing sustainable populations of native plants and animals; maximizing the connections among ecological communities; removing invasive, non-native plants and animals; and reducing nuisance native species to the extent that they do not affect the Everglades ecosystem.

Everglades Restoration: Critical Steps in 2004

Two crucial components of the South Florida ecosystem -- Indian River Lagoon and Picayune Strand -- are at risk due to encroaching urban development, escalating costs, and impending estuarine collapse. Like other components of the CERP, these projects are largely an attempt to repair previous damage by federal and state projects. Unless Congress authorizes these projects this year, there is a risk that key aspects of Everglades restoration will become unattainable.

These projects have the most potential to immediately enlarge the spatial extent of the remaining Everglades. These vital areas could provide impressive ecological benefits by 2012, including: 170,000 acres of restored wetland habitat for more than 2,200 species, at least 35 of which are threatened or endangered; tens of millions of dollars in associated economic and quality of life benefits annually; and improved water flows for the Everglades, Florida Bay, Ten Thousand Islands, St. Lucie Estuary, and Lake Okeechobee.

Indian River Lagoon South: Ultimately, the Indian River Lagoon Project, pending Congressional action, will reverse the ecologically and economically devastating effects of the C&SF Project as currently configured, restore a nationally significant and unique system and the most diverse estuary in North America, and help to restore Lake Okeechobee. Restoring wetlands and retaining flows now harming the Indian River Lagoon, will recreate more than 100,000 acres of healthy habitat; help provide an estimated $731 million annual regional economic contribution from tourism, fishing, and real estate; and help prevent fish kills such as occurred in June 2002.

Of particular note is *Natural Storage and Treatment*, restored natural areas clustered in large greenways around existing state conservation lands determined by the U.S. Fish and Wildlife Service as critically important to survival of listed species. *Natural Storage* also provides flood protection, water cleansing, groundwater recharge, wildlife habitat, and extensive recreation opportunities. Additionally, this component has low continuing energy cost and is virtually damage proof in natural disasters. It allows landowners options for purchase or easement and makes possible the integration of federal farm conservation programs.

Picayune Strand: The Picayune Strand Restoration Project will restore more than 70,000 acres of habitat. At the edge of the Big Cypress Swamp and Fakahatchee Strand sits the "Southern Golden Gate Estates" subdivision, platted by long-defunct land development schemes. This project will restore the Picayune Strand, re-establish natural sheet flow to the Ten Thousand Islands (part of Everglades National Park), and restore ecological connectivity of the Florida Panther National Wildlife Refuge, the Belle Meade State Conservation and Recreation Lands Project Area, and the Fakahatchee Strand State Preserve. These restoration benefits are too long overdue and critically needed. The state has already made tremendous progress on this project by acquiring with state and federal funds virtually all of the land necessary for restoration to begin.

Everglades Restoration is Essential to South Florida's Sustainability

Ecological restoration will complement and enhance our economy and quality of life. South Florida is an international, commercial, agricultural, fisheries and tourism center with a growing population reflecting ethnic, economic, and social diversity. The region's diverse populations have one thing in common: dependence on a fully functioning Everglades for an adequate fresh water supply. The waters of the Everglades system recharge the Biscayne aquifer, southeast Florida's sole source of drinking water. This fresh water supply is vital to a healthy and sustainable economy, and overall quality of life. Simply put, restoration of the Everglades is the only way to ensure a continuous, sufficient quantity of water for a sustainable South Florida ecosystem.

The recognition that the environment, the economy, and society are intrinsically interdependent evolved from the Governor's Commission for a Sustainable South Florida ("Commission"), which was created in 1994 to serve as a voice for the many state agencies and stakeholders. The Commission was a broad-based stakeholder body charged with developing consensus recommendations for a sustainable South Florida. One of the Commission's first findings was that South Florida, on its present course, is not sustainable."[3] As a result of these findings, the urgency of Everglades restoration became apparent. In partnership with the South Florida Ecosystem Restoration Task Force, the Commission crafted and unanimously adopted the *Conceptual Plan for the C&SF Project Restudy*, adopted by Congress in WRDA 1996 as the framework for CERP.[4] Many business and civic groups have ratified the Commission's ideas.

According to the Greater Miami Chamber of Commerce:

> *The economy and the high quality of life residents and visitors currently enjoy hinges on the successful restoration of the Everglades. There is no greater example of the interrelationships between society, the economy, and natural environment than South Florida. National and international precedents for resolving the complex issues of sustainability, restoration and conservation will be set through restoration of our nation's most endangered and unique habitat.*[5]

[3] Initial Report (October 1, 1995).
[4] Water Resources Development Act of 1996.
[5] Greater Miami Chamber of Commerce, Partners for Progress and Sustainability: The Everglades and the South Florida Business Community (June 1999).

Partnership is the Key to Success

The very idea of Everglades restoration is based on collaboration and partnerships between environmental, social, tribal, and economic interests, and between the many levels of government representing the public and taxpayers. The Governor's Commission for a Sustainable South Florida, which crafted the consensus framework for Everglades restoration, was dissolved in May 1999, but the stakeholders – the business, agricultural, and conservation communities – have remained committed to achieving our common goals as outlined first in the Conceptual Plan and adopted into the Comprehensive Everglades Restoration Plan. The work of the Commission resulted in an unparalleled sense of reciprocal trust and common commitment.

Unprecedented Federal/State Partnership

The 50/50 partnership between the federal government and the State of Florida for all aspects of Everglades restoration is unprecedented. This partnership between America and Florida on these projects will contribute significant improvements to the Everglades and our nation's natural resources. The Everglades is a model for future environmental restoration projects, reversing the unforeseen consequences of a decades-old Corps project as equal partners with the state. To reiterate the insightful words of Senator Bob Graham, "Everglades restoration depends on a strong federal-state partnership in which each partner needs to have trust and respect for the other."[6]

Securing Lands Needed for Restoration

The integrity of the CERP rests in part on the ability to acquire the land necessary to implement project components. Congress has appropriated nearly $300 million for Everglades lands, including Picayune Strand. The State of Florida and the South Florida Water Management District have already expended nearly $1 billion to secure CERP lands. Additionally, the State of Florida has committed to providing an additional $500 million over the remainder of the decade.

Table. CERP Land Acquisition Status[7]

CERP Land Acquisition	Acres Acquired	% Acquired	Estimated Cost	Remaining Cost
Indian River Lagoon	31,000	25%	$116 Million	$400 Million
Picayune Strand	55,000	99%	$100 Million	N/A
Total CERP	200,000	50%	$1.02 Billion	$1.28 Billion

There is a race against development to purchase these lands and not lose irreplaceable benefits. While significant progress has been made, the pressures of price escalation and development increase every day – by as much as 40% annually – and will rob us of this historic opportunity if we do not move expeditiously to buy land and approve and build the projects authorized by CERP.

Indian River Lagoon and Picayune Strand Restoration are vital components of the overall CERP. Local support is strong evidence that the US Army Corps of Engineers and the South Florida Water Management District have been interactive and responsive to citizens' needs and concerns. These projects are models to be followed by the Corps and the South Florida Water Management District as they develop CERP projects for implementation, working together with stakeholders.

[6] Conference Rep. on H.R. 2466, Dept. of Interior and Related Agencies Appropriations Act, 2000 (October 20, 1999).

[7] Source: South Florida Water Management District, CERP Master Land Acquisition Tracking Chart (December 31, 2003).

Restoration Has Already Begun

Both the federal and state partners have demonstrated commitment to early restoration benefits for the Indian River Lagoon and Picayune Strand. October 16, 2003 was an historic day. Governor Bush, joined by federal, tribal, and environmental partners, broke ground on an initial phase of Picayune Strand Restoration, which includes removing roads and exotic plants, and backfilling seven miles of Prairie Canal. As part of a joint commitment to restore the River of Grass, the state and federal governments invested nearly $100 million to acquire more than 19,000 lots in the abandoned subdivision. On November 7, 2003, the U.S. Army Corps of Engineers, along with other federal, state, and local officials and environmental partners, broke ground on the Ten Mile Creek Water Preserve Area (WPA) Critical Restoration Project (WRDA 1996), marking the beginning of the restoration of the Indian River Lagoon Basin.

Conclusion

To conclude, Mr. Chairman, we urge Congress to fulfill the promise of Everglades restoration by authorizing on schedule Indian River Lagoon South and Picayune Strand CERP projects so that the pressures of exploding growth do not rob us of this historic opportunity. These projects provide the earliest ecological and economic value for the investment that Florida's and America's taxpayers are making in this historic restoration effort. This kind of early success is essential to maintaining the broad support CERP now enjoys from both the public and private sectors. Moving forward requires prompt Congressional approval.

The Comprehensive Everglades Restoration Plan is an outstanding example of the Corps repairing damage from previous water resource projects while functioning in a manner that is responsive, accountable, and fiscally responsible. The Corps has set about to undo the damage wrought by a half-century of civil works projects that diked and drained the Everglades and each day continue to divert up to two billion gallons of life-giving water away from the Everglades and out to sea. In Everglades restoration, the Corps has demonstrated public accountability by conducting extensive public outreach and remaining extremely open and accessible throughout the process.

If we fulfill this promise, the restored Everglades will serve as a model for future ecosystem restoration projects throughout our nation and the world. We greatly appreciate this opportunity to provide the Subcommittee with our views on the Everglades, and are committed to continuing to work with you toward the restoration of America's Everglades.

> *Perhaps even in this last hour, in a new relation of usefulness and beauty, the vast, magnificent, subtle and unique region of the Everglades may not be utterly lost.*
>
> -Marjory Stoneman Douglas

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Statement of Doug Smith, Chairman on behalf of the Board of County Commissioners Martin County, Florida to the Subcommittee on Water Resources and the Environment House Committee on Transportation and Infrastructure July 22, 2004

Statement of Doug Smith, Chairman
Board of County Commissioners
Martin County, Florida
to the
Subcommittee on Water Resources and the Environment
House Committee on Transportation and Infrastructure
July 22, 2004

Mr. Chairman and Members of the Subcommittee:

Thank you for inviting the testimony of the Martin County Board of County Commissioners. With me are the Vice Chair of the Board, Sarah Heard, Commissioner Michael DiTerlizzi, and County Water Quality Chief Gary Roderick. We have come to Washington three times this spring to attend important meetings involving the Indian River Lagoon-South (IRL-S) project. We are delighted to have such opportunities to explain why IRL-S is so important to the residents of Martin County and surrounding areas and why it is an integral part of the Comprehensive Everglades Restoration Plan. We also support authorization of the Southern Golden Gate Estates project at the earliest possible date.

We are grateful for the strong support and leadership of the Florida Congressional Delegation, especially Representatives Mark Foley, Mario Diaz-Balart and Alcee Hastings and Senators Bob Graham and Bill Nelson.

The citizens of our county, and indeed Everglades restoration itself, have waited long enough. The road to the present started back in 1992 when initial planning began on an Indian River Lagoon project. The plans have been altered in many respects over the years. During that period, a marvelous cooperative relationship emerged between the Federal government, the State of Florida and local entities—especially Martin County. Now at last we have a project that is much improved and ready for final authorization. Additional delay in approving this project can only mean additional cost and an unfortunate setback for Everglades restoration. We strongly support Senate passage this year of a Water Resources Development Act that includes IRL-S, and we respectfully urge you to support making this vital project a part of the final legislation.

Indian River Lagoon-South and the Comprehensive Everglades Restoration Plan

The Water Resources Development Act of 2000 designated the Comprehensive Everglades Restoration Plan (CERP) to be the framework for changes to the Central and Southern Florida Project that are necessary to "restore, preserve, and protect the South Florida ecosystem..."

That legislation specified that the South Florida ecosystem includes the land and water within the boundary of the South Florida Water Management District in effect on July 1, 1999. The area included in IRL-S clearly is within these boundaries. IRL-S is an integral part of the Everglades ecosystem and will protect the most biologically diverse estuary system in North America. It will restore habitat for more than 4,300 species of plants and animals. It will help to meet the water quality goals of Lake Okeechobee, which will have a positive affect on areas below the Lake. IRL-S can supply a substantial amount of clean freshwater, that can be delivered to Lake Okeechobee and areas further south in the Everglades ecosystem.

Statements that IRL-S should be considered apart from Everglades restoration are misplaced.

The Present Crisis

IRL-S is the first component of CERP to seek authorization. It includes elements in Martin, St. Lucie and Okeechobee counties in the area east of Lake Okeechobee.

The location of the Indian River Lagoon estuary at the merging point of cool and warm waters along the Atlantic Ocean gives rise to the most biologically diverse estuary in North America.

This critical area faces disaster due to efforts decades ago to drain the Everglades. Man's construction of endless canals and barriers changed the traditional north to south flow of the Everglades to the unnatural shunting of water eastward and westward to sea—some 1.7 billion gallons of fresh water a day lost to tide. As a result of this rerouting of water, the Indian River Lagoon system has been subjected to unnatural levels of freshwater, upsetting the fresh water/salt water balance, causing severe damage.

In the winter and spring of 1998, El Nino rains in central and south Florida filled Lake Okeechobee to levels that threatened the integrity of the Herbert Hoover Dike and required maximum discharges through the C-44 canal into the St. Lucie River. The St. Lucie River was greatly impacted by drastic decreases in salinity.

During this time of heavy discharges, hundreds of calls to the Florida Department of Environmental Protection (DEP) were logged reporting more than 33 species of fish found with lesions in the St. Lucie Estuary. Over 450 fish were sent to the DEP Florida Marine Research Institute (FMRI) for analysis. Historically, prolonged low salinity in the St. Lucie estuary has been associated with an increase in numbers of fish with lesions. Scientists at FMRI have determined that a bloom of a freshwater-tolerant fungus, called *Aphanomyces invadans*, was attributed to the fresh water discharges from Lake Okeechobee and was the probable cause of the lesions.

Recent studies show that 33 % of estuary dolphins and 55% of sea turtles are inflicted with tumors, lesions and ulcers. Some species of fish no longer reproduce in the estuary.

As the discharged fresh water races into the St. Lucie River, the Indian River Lagoon and finally the Atlantic Ocean, its velocity is like that of whitewater rapids—except its color is an ugly brown. The discharges deposit useless muck that suffocates everything it covers, including oyster beds and fish habitat. When the discharges are underway, an ugly plume can be seen extending for miles into the Atlantic.

The economy of our area depends on the health of our waterways and the species that thrive there. The city of Stuart, the Martin County seat, is known as the sailfish capital of the world. Tourism and sport fishing are our lifeblood. They contribute $730 million dollars to our economy annually. Some 7,000 jobs in our area depend on a healthy estuary. Yet whenever the powers that govern the level of Lake Okeechobee order the level of the lake lowered, our economy grinds to a standstill.

For years we have witnessed the decline of a wonderful natural system. Now CERP has given us hope that we can save our estuary and our economy.

Description of the Project

The recommended plan consists of five components:

- **Reservoirs.** Construction and operation of four above ground freshwater storage reservoirs (130,000 acre feet of storage), and their connecting canals, control structures, levees and pumps would capture and release water from the C-44, C-23, C-24, and C-25 canals. These canals are located in Martin and St. Lucie counties, Florida. This component will reduce the storage demands on Lake Okeechobee and control fresh water discharges to the St. Lucie River and Indian River Lagoon.
- **Stormwater Treatment Areas.** Construction and operation of stormwater treatment areas would treat freshwater discharges from the canals and provide for nutrient reduction.
- **Natural Storage and Treatment Areas and North Fork Floodplain Restoration.** Natural storage areas (over 90,000 acres of wetlands) would be acquired for freshwater storage and treatment. Onsite storage would also recharge

the aquifer with freshwater. The North Fork Floodplain Restoration would allow for additional flow using a northern diversion.

- **Water Diversion.** Diversion of existing flows to provide more freshwater discharge locations such as mentioned above, rather than the large rainy season freshwater flows to the St. Lucie River Middle Estuary of recent years.
- **Muck Removal and Habitat Improvement.** Removal of 7.9 million cubic yards of muck from four dead zones located in the North and South Forks of the St. Lucie River, as well as the Middle Estuary, of the St. Lucie River.

Project benefits include:
--Reduction in the frequency of damaging freshwater discharges to St. Lucie Estuary and Indian River Lagoon.
--Improvement of the quantity, quality, timing and distribution of water deliveries to the St. Lucie River and Estuary, Indian River Lagoon and Lake Okeechobee.
--Restoration of historical natural wetland-upland mosaic systems to preserve, protect and increase the spatial extent and quality of wetlands.
--Increased environmental and agricultural water supply.
--Improved economic viability of commercial fishery and recreational opportunities that are dependant on a healthy river and estuary.

Why IRL-S Needs Authorization Now

The Everglades watershed is broken and in dire need of repair. A watershed cannot be fixed by trying to modify its discharge point. The process must begin upstream. The Kissimmee Basin restoration at the top of the Everglades watershed is well underway. The next watershed basins south of the Kissimmee River basin with a recommended plan and Project Implementation Report is the IRL-S portion of the Comprehensive Everglades Restoration Plan. The IRL-S is the next logical step in the Everglades restoration process. The IRL-S portion of the CERP complements the Everglades restoration efforts already underway.

North America's most biologically diverse estuary is under immediate threat. The problem of massive discharges from Lake Okeechobee loom constantly. This project would address the problem of the discharges. If it is delayed, the discharges will continue to eat away at our estuary and our economy. No other area of the Everglades is more directly threatened than our estuary. Therefore it is most appropriate the IRL-S is the first CERP project to seek authorization.

The land needed for IRL-S is available now. It may not be available for long. Our area is being developed at a rapid rate. Over 30,000 acres of land, or approximately 25% of the land needed for the project, have been purchased by the state. Martin County is proud to have assisted in these purchases. If IRL-S is not authorized this year, we must wait until the next Water Resources Development Act (WRDA), and Congress might not pass another WRDA for years. In the meantime, the needed land could be purchased by developers, becoming lost to the natural system forever. At the least, land prices will continue to rise. In our area, recent land prices have increased at a rate of 20% within the

last two years. Delay translates into increased costs and can eventually threaten the unity behind the project that exists today.

A delay of IRL-S could well delay the CERP projects that follow. The Everglades can scarcely afford more delay in restoration.

IRL-S will restore and protect over 90,000 acres of wetlands. The President recognizes the great contributions of our nation's wetlands. This April, in his Earth Day speech, the President announced an initiative to restore three million acres of wetlands over the next five years. Upon learning of the President's bold initiative, I wrote to the President, on behalf of the Board of County Commissioners, and congratulated him on his recognition of the value of preserving the nation's wetlands. The letter also pointed out how IRL-S would contribute to his initiative and urged him to ask Congress to authorize IRL-S this year. That letter to the President is attached to this statement.

Delaying IRL-S will risk losing the very types of vital wetlands the President wants to preserve.

Unprecedented Unity for IRL-S Authorization

In 1998 and 2003 after fresh water discharges from the Central and South Florida Project Canal basin discharges and Lake Okeechobee discharges, citizens voicing outrage for the impacts to the ecosystem signed over 50,000 petitions. On September 27, 2003, approximately one thousand area citizens held a rally at the S-80 discharge structure to voice their concern about the Lake Okeechobee discharges and their unanimous support for the IRL-S portion of the Comprehensive Everglades Restoration Plan.

The IRL-S portion of the CERP has been in the planning stages for over six years. Public participation has been a big part of the process, from citizens contributing on the Project Development Teams to local grass root organizations meeting regularly to stay informed and offering any assistance to the Everglades effort. Locally, groups such as the Rivers Coalition and the St. Lucie River Initiative, which represent over 100,000 business, agricultural, marine, environmental, sports, recreation, and local resident interests, have worked diligently for years to raise awareness and organize the community for a common purpose with a common goal.

The water level in Lake Okeechobee is too high, Florida Bay and the Everglades are not receiving enough good quality fresh water, and the Caloosahatchcee River and the St. Lucie River are receiving too much fresh water. The solution to saving Lake Okeechobee, Florida Bay and the Everglades is the same as the solution to saving the Caloosahatchee and St. Lucie Estuaries. That solution is to provide more storage in basins surrounding Lake Okeechobee, sending less high volume discharges to the estuaries and sending more clean treated water south to the Everglades and Florida Bay.

In 2002 and again in 2004 the IRL-S CERP plan was presented by the Corps of Engineers at local meetings that were attended by hundreds of local area residents. So many

citizens were in attendance that the Corps representatives commented that they had rarely seen so much public interest and participation. The Corps has also been impressed by the overwhelming positive public response to the recommended plan.

The South Atlantic District Office of the U.S. Army Corps of Engineers developed a process for an independent scientific review to be a mandatory step prior to transmittal of the Feasibility Study and Project Implementation Report. The purpose of the independent scientific review was to ensure that the plans presented in the analysis meet the restoration objectives and that the plan formulation and that project benefits are supported by sound science. The panelists were selected based on their broad range of backgrounds in scientific, engineering, and planning expertise in estuaries, wetlands, groundwater, sediment, nutrients, and water resources. It was the opinion of this review panel that the plans presented in the IRL-S Plan Implementation Report have a high likelihood of meeting the restoration objectives and that the supporting technical analyses was based upon sound science. A copy of the letter from this panel to Corps District Engineer, Col. Robert Carpenter, is attached.

The citizens participation in the development of the plan and in the development of the components of the IRL-S portion of the CERP helped bring about reasonable compromise and consensus.

Local area support does not end with just a thank you. In 1998, the citizens of Martin County voted for a three year, one cent sales tax to contribute to the IRL-S plan effort. The tax was in effect from 1999 to 2001 and raised over $50 million in revenue. Some $26 million dollars has been spent to date, and the funding is being leveraged with partnerships from other funding sources, such as the Wetland Reserve Program, to maximize CERP land purchases in the most efficient and effective manner.

This local funding contribution puts a unique twist on the traditional Federal/State partnerships. It demonstrates commitment and support for the recommended IRL-S CERP component by the area citizens who are willing to take ownership in the recommended plan. The local funding contribution has also allowed the State of Florida to accelerate its efforts on elements of the project. The state of Florida, like Martin County, is putting its money into the project up front to accelerate project components.

The common goal of Everglades restoration, merged with citizen involvement, intergovernmental coordination, independent scientific review, and local ownership in the development of a sound plan that meets its restoration objectives, has led to virtually unanimous support for the project.

Attached is a list of governmental and private entities that have adopted resolutions of support.

I have also attached to this statement a letter sent to Assistant Secretary of the Army (Civil Works) John Paul Woodley, Jr., by the South Florida Ecosystem Restoration Task Force. The letter endorses the IRL-S project and urges the Army to complete the Project

Implementation Report process as expeditiously as possible. The Task Force was created by the Water Resources Development Act of 1996 for the purpose of coordinating Everglades restoration efforts. Its membership is composed of representatives of Federal, State, Tribal and Local governmental bodies. The strong support of this distinguished group is significant. No group is more knowledgeable on matters of Everglades restoration.

We were honored that the Task Force had its most recent meeting in May in Martin County, and its members had the opportunity to visit the Indian River Lagoon area.

Conclusion

Mr. Chairman and Members of the Subcommittee, I am honored to speak for my colleagues on the Martin County Commission. I am even more honored to speak for the residents of our great County. We, the citizens of Martin County, have invested our personal resources in this project. We do not come to this Subcommittee asking for a handout. Indeed we are asking for the Congress to authorize what we have already endorsed with our contributions. Indian River Lagoon-South is a part of our lives. We have participated in every step of the way in its planning. We have worked in endless planning sessions as the Project Implementation Report process moved ahead. We have worked with all interest groups to forge a consensus behind this bold and unique CERP project. We have held rallies and enlisted the support of every county in South Florida, numerous other governmental entities and private organizations.

We pledge to continue to work as IRL-S is put into the ground. We have benefited from living in an area flush with the wonders of the Everglades ecosystem, and we have recognized our solemn duty to preserve this marvelous asset for future generations. Now we ask you to do the same. Please take this first step by authorizing the Indian River Lagoon- South Project this year. The Comprehensive Everglades Restoration Plan holds great promise for restoring the magnificent Everglades. It will be a long journey to achieve this great promise. But this journey, as worthy as it is, cannot begin without taking this first step.

Thank you.

Doug Smith, Chairman
Martin County, Florida, Board of County Commissioners
2401 S.E. Monterey Road
Stuart, Florida 34996

772 288-5400

Local Contact in Washington, DC
Fowler West
The Washington Group
1401 K St., NW
10th Floor
Washington, DC 20005
202 789-2111

The statement for the Subcommittee hearing on July 22, 2004, urges prompt authorization of the Indian River Lagoon-South (IRL-S) component of the Comprehensive Everglades Restoration Plan (CERP).

The statement describes:
--The relationship for IRL-S to CERP
--The present crisis in the Martin County area
--A description of IRL-S
--Why IRL-S needs to be authorized at the earliest possible time
--The unity behind authorizing IRL-S

MARTIN COUNTY
BOARD OF COUNTY COMMISSIONERS
2401 S.E. MONTEREY ROAD • STUART, FL 34996

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ATTACHMENTS
TO THE
STATEMENT OF DOUG SMITH, CHAIRMAN
BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA
before the
SUBCOMMITTEE ON WATER RESOURCES AND THE ENVIRONMENT

HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

July 22, 2004

Letter from Chairman Doug Smith to the President—April 29, 2004

Letter from Independent Scientific Review Panel to Col. Robert Carpenter, District Engineer, US Corps of Engineers—May 3, 2004

List of Organizations Endorsing IRL-S Project

May 4, 2004, Letter from the South Florida Ecosystem Restoration Task Force to Assistant Secretary of the Army John Paul Woodley

Martin County Pictorial on IRL-S

MARTIN COUNTY
BOARD OF COUNTY COMMISSIONERS
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April 29, 2004

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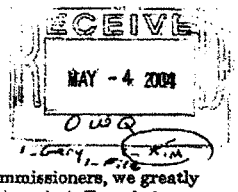
President George W. Bush
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500



Dear Mr. President:

On behalf of the Martin County Board of County Commissioners, we greatly appreciate your strong support of the restoration of America's Everglades. You and Governor Jeb Bush have made the Everglades the centerpiece of your respective environmental agendas.

Martin County, Florida is the site of the first project under the Comprehensive Everglades Restoration Plan (CERP), the Indian River Lagoon South (IRLS), which needs Congressional authorization. It includes most of the elements involved in the entire Everglades restoration plan embodied in CERP.

We, the County Commissioners, want you to know that the citizens of Martin County and surrounding jurisdictions strongly support this project. IRLS also has the support of all environmental and business groups in the area. To demonstrate their support, the citizens of Martin County have willingly contributed, through a tax referendum, nearly $50 million to purchase land needed for the project.

We applaud your Earth Day announcement that your Administration will create, improve and protect some three million acres of wetlands over the next five years. This is a noble agenda that will benefit all Americans, and we want to be a part of your effort.

We believe that the IRLS project can be a great boost to your new Wetlands Initiative. It is in the final stages of preparation for Congressional authorization, and it must be authorized this year in order for Everglades restoration to avoid a major delay. This one Everglades project would protect, improve and create some 92,000 acres of wetlands in an area that is rapidly developing. Authorization of the IRLS this year could contribute substantially to your Wetlands Initiative.

However, without IRLS, this massive wetlands opportunity will be lost forever. In South Florida, roughly fifty percent of the pre-drainage wetland area and ninety percent of pinelands have been lost to development. The IRLS project provides a unique opportunity for rehydration and habitat restoration due to the current availability of large tracts of land.

The IRLS project will help meet the system-wide CERP goal of increasing such wetland restoration and improving wildlife habitat that may be more difficult, if not impossible, to do in the more populated areas to the south. Among the many species of birds for which the Everglades is noted are the federally listed endangered Wood Stork (sometimes referred to as the Wood Ibis), the Snail Kite, the threatened Audubon's Crested Caracara and the state listed Sandhill Crane. The approximately 92,000 acres of wetlands created and protected by the IRLS project will make many favorable breeding colony locations for these important birds.

The fact that land is available now is an incentive to move quickly since land values in our area of Florida have doubled in the last year. About a third of the needed land has been acquired. Delay will translate into great cost increases.

Mr. President, we respectfully request that you indicate to Congress your support for the authorization of the IRLS project this year. Favorable action by the Congress will serve to move implementation of CERP forward and ensure great progress toward the goals of your new Wetlands Initiative.

Again, we congratulate you on your strong support for restoring the Everglades and for your Earth Day announcement on increasing the nation's wetlands.

Sincerely,

Doug Smith, Chairman
Martin County Board of County Commissioners

DS/kl/kp

cc: Martin County Board of County Commissioners
Martin County Administration
Office of Water Quality
Fowler West, The Washington Group

JOHN J BURNS

May 3, 2004

Colonel Robert M. Carpenter
Commander and District Engineer
U.S. Army Engineer District, Jacksonville
P.O. Box 4970
701 San Marco Blvd.
Jacksonville, Florida. 32232-0019

Dear Colonel Carpenter:

Enclosed is the final report of the Indian River Lagoon – South Independent Scientific Review Panel. The Panel is delighted to have had the opportunity to review the Indian River Lagoon – South Project Implementation Report. We are hopeful that our expedited review of this important and complex project will be useful to you as you proceed with the project.

The Project Implementation Report stands as an impressive document that addresses a substantial number of issues with an obvious concern for achieving public goals and legislated directives. The team that created the Report, as well as those individuals responsible for integrating the pieces into a coherent whole should be highly commended for their efforts. It is the opinion of this review panel that the plans presented in the Report have a high likelihood of meeting the restoration objectives and that the supporting technical analyses are based upon sound science. There are considerable uncertainties inherent to a project of this complexity. Therefore, the panel has made recommendations for additional detailed analyses as this project is implemented. Again, we appreciate the opportunity to be part of this important undertaking and hope that our review will have added value to the process.

Please feel free to contact me or other members of the Panel if we can be of further assistance.

Sincerely,

John J. Burns
Chairman
Indian River Lagoon – South
Independent Scientific Review Panel

Enclosure

7807 CARRLEIGH PARKWAY • SPRINGFIELD VA • 22152
PHONE: 703-569-5829
FAX: 703-569-5829
CELL 703-598-9655
E-MAIL: JOHNBURNS1@COX.NET

ENDORSEMENTS
OF THE
INDIAN RIVER LAGOON SOUTH PROJECT

COUNTY COMMISSIONERS OF BROWARD COUNTY, FLORIDA
COUNTY COMMISSIONERS OF COLLIER COUNTY, FLORIDA
COUNTY COALITION FOR RESPONSIGLE MANAGEMENT OF LAKE OKEECHOBEE
AND ST. LUCIE AND CALOOSAHATCHEE ESTUARIES
COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA
COUNTY COMMISSIONERS OF MARTIN COUNTY, FLORIDA
COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA
COUNTY COMMISSIONERS OF MONROE COUNTY, FLORIDA
COUNTY COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA
COUNTY COMMISSIONERS OF ST. LUCIE COUNTY, FLORIDA
CHAMBER SOUTH ENVIRONMENTAL COMMITTEE
GREATER MIAMI CHAMBER OF COMMERCE
SOUTH BEACH AND GREATER MIAMI HISPANIC CHAMBER OF COMMERCE
FLORIDA STATE CONFERENCE OF NAACP BRANCHES
AUDUBON OF FLORIDA
DEFENDERS OF WILDLIFE
ENVIRONMENTAL AND LAND USE LAW CENTER
THE EVERGLADES FOUNDATION
THE EVERGLADES TRUST
NATIONAL AUDUBON SOCIETY
NATIONAL PARKS CONSERVATION ASSOCIATION
NATIONAL WILDLIFE FEDERATION
NATURAL RESOURCES DEFENSE COUNCIL
1000 FRIENDS OF FLORIDA
SIERRA CLUB
WORLD WILDLIFE FUND
NORTHEAST DADE COALITION
DAY CANCER RESEARCH FOUNDATION, INC.

SOUTH FLORIDA ECOSYSTEM RESTORATION TASK FORCE
Office of the Executive Director

May 4, 2004

John Paul Woodley, Jr.
Assistant Secretary of the Army (Civil Works)
108 Army Pentagon, Room 3E446
Washington, DC 20310-0108

Dear Mr. Woodley:

I am writing to convey the unanimous support of the South Florida Ecosystem Restoration Task Force for the expeditious completion of the Corps of Engineers' Indian River Lagoon-South (IRL) Project Implementation Report (PIR). As you know the intergovernmental South Florida Ecosystem Restoration Task Force was established by Congress in the Water Resources Development Act of 1996 and the membership includes representatives from the key local, Tribal, State and Federal entities who are collaborating on the implementation of the Comprehensive Everglades Restoration Plan (CERP), as well as other projects intended to restore the Everglades.

The Task Force strongly believes that implementing CERP in a manner that ensures achievement of natural system restoration goals, while also providing for the other water related needs of the region is essential to restoring the South Florida ecosystem. Because of the importance of implementing CERP, we believe that it is critical to maintain the momentum that began in December 2000 when Congress authorized the initial CERP projects. As a result, we support the expeditious completion of the public process for the IRL project.

The project recommends corrective actions intended to provide a more natural annual freshwater flow, while maintaining the current level of flood protection and freshwater supplies for the Indian River region. The project is anticipated to reduce the amount of water going to tide by providing both natural and reservoir storage. That storage will improve water quality; provide water to enhance the natural sheet flow to the remaining Everglades; and provide water for agricultural and other uses. The project will also improve the water quality in Lake Okeechobee and increase wetlands to provide habitat for native species, including many that are endangered.

The plan represents the necessary first step for the recovery of the natural resources of the St. Lucie Estuary and Indian River Lagoon, which have been damaged by unnatural releases and excessive volumes of stormwater from Lake Okeechobee that have been released to tide. In addition to the natural system benefits, the plan also provides significant benefits for agricultural and economic interests, both of which support the project.

c/o Florida International University - OE Building, Room 148 - University Park Campus
Miami, Florida 33199
Phone: 305-348-1665 – Fax: 305-348-1667

SOUTH FLORIDA ECOSYSTEM RESTORATION TASK FORCE
Office of the Executive Director

As noted above, this plan has an unprecedented level of support from all stakeholder groups, including area businesses, agricultural interests, local civic organizations, local governmental bodies, environmental groups, and, of course, the State of Florida. A letter to Florida's Congressional Delegation from Ms. Colleen Castille, Secretary of the Florida Department of Environmental Protection, strongly supporting Congressional authorization for IRL this year is enclosed.

Local governments are doing their part as well and Martin County has provided significant financial resources to implement this project. To date, the County has raised over fifty (50) million dollars from Martin County citizens to purchase the necessary lands upon which the project features will be built.

The Army Corps of Engineers and the South Florida Water Management District are to be commended for shepherding this project through the detailed planning stage. We respectfully urge your support to promptly complete the public process for the IRL project. The Task Force stands ready to assist you in any way that we can and we appreciate the Administration's support for our Everglades restoration efforts.

Sincerely,

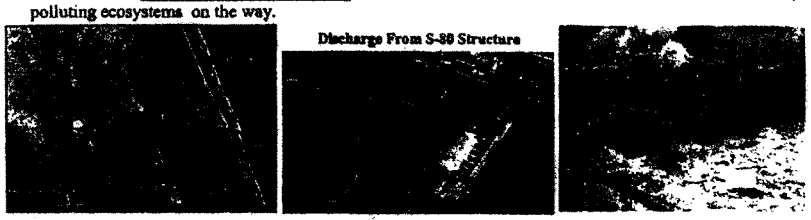
Marti Allbright

Marti Allbright, Chair
South Florida Ecosystem Restoration
Task Force

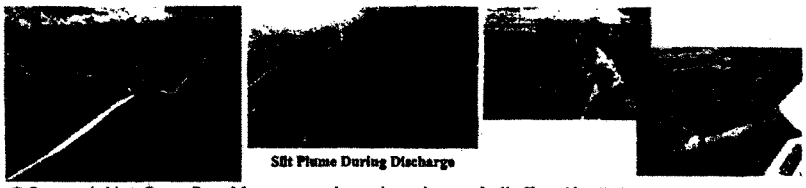
Enclosure

c/o Florida International University - OE Building, Room 148 - University Park Campus
Miami, Florida 33199
Phone: 305-348-1665 – Fax: 305-348-1667

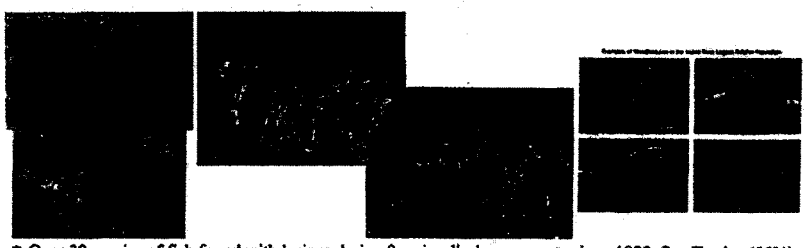
- Historic Flow - Kissimmee River valley, Lake Okeechobee & the Everglades "River of Grass"
- Current Flow - 1.7 Billion Gallons Per Day Freshwater wasted to the Atlantic Ocean & Gulf of Mexico, polluting ecosystems on the way.



- Indian River Lagoon & St. Lucie Estuary—Most biodiverse ecosystem in North America
- Discharges have exceeded 4.5 billion gallons per day polluted freshwater.



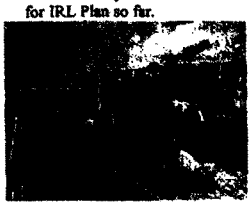
- Seagrass habitat, Oyster Bars, Mangrove marshes and nearshore reefs all affected by discharges.
- Up to 598 cubic yards per day of silt during discharge events turns into 6-8 ft. deep anaerobic muck bottom.



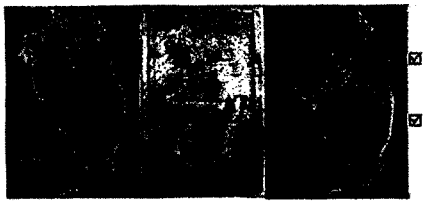
- Over 30 species of fish found with lesions during 8 major discharge events since 1980. Sea Turtles (55%) with fibropapillomatosis, and Bottlenose Dolphin (33%) with Pox virus and lobomycosis now appear in greater numbers in the Indian River Lagoon.

The Environment IS the Economy in the St. Lucie Estuary and Indian River Lagoon

- Supporting an annual economic impact of $730 Million, over 7,000 jobs and $588 Million in waterfront property values in Martin County alone.
- State of Florida committed $100 million per year to CERP and funded 96 regional projects totaling $57 million (50% local matching).
- Martin County raised $50 million in 3 yr special sales tax for non-federal share and purchased $113 million of lands for IRL Plan so far.



- Rally for The Rivers - Sept. 27, 2003 - 965 people, Real People & Real Signatures - 40,000 ('98), 10,000 ('03) 50,000 people who want to see some action by their political leaders.



What Should Be Done

☑ Restore the Kissimmee River back to its natural floodplain.

☑ Revise Upper Chain of Lakes & Lake Okeechobee Regulation Schedule to Lower Levels.

☑ The Everglades Agricultural Area (EAA) - Sugar Cane - blocks the "River of Grass" - Redirect surface water flow through the EAA and Restore the River of Grass for the restoration of the Everglades.

☑ The Central and South Florida (C&SF) Project, constructed in the 1950's, diverts surface waters into canals from agricultural areas. These canals divert the water into the St. Lucie Estuary and the Indian River Lagoon.

☑ Move forward with the Indian River Lagoon South Plan, two components of CERP. $ 1.2 billion (50/50 federal/non-federal).

MARTIN COUNTY
BOARD OF COUNTY COMMISSIONERS
2401 S.E. MONTEREY ROAD • STUART, FL 34996

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August 13, 2004

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File: chr041.238.aw

The Honorable John J. Duncan, Jr.
U.S. House of Representatives
Chairman, Subcommittee on Water Resources and Environment
2267 Rayburn House Office Building
Washington, D.C. 20515-4202

Dear Mr. Chairman,

The following is in response to your letter dated July 29th requesting additional information regarding the Indian River Lagoon portion of the Comprehensive Everglades Restoration Plan (CERP).

1) What is Martin County doing to control and improve storm water runoff to the Indian River Lagoon?

RESPONSE: In February of 2001 The Martin County Board of County Commissioners (BCC) created the Office of Water Quality (OWQ) that is responsible for water quality and water resource projects and programs, locally and regionally, that enhance and protect Lake Okeechobee, the St. Lucie River, the Loxahatchee River and Indian River Lagoon, and thereby enhance the quality of life for the citizens of Martin County.

In 1998 Martin County past a one-cent sales tax for three years to raise money to contribute to the Comprehensive Everglades Restoration Plan in addition to state and federal funding sources. This tax raised over $50 million dollars to purchase lands required for the Comprehensive Everglades Restoration Plan and the Indian River Lagoon.

In June of 2003 Martin County obtained its Phase II Municipal Storm Sewer Service System (MS4) permits and is implementing the National Pollution Discharge Elimination System (NPDES) MS4 permit requirements of this unfunded federal mandate.

The Martin County Utilities Department has prioritized on-site septic system impacts to the Indian River Lagoon. The Martin County Public Health Unit for SFWMD determined the areas for evaluation in a document entitled "Martin County On-Site Septic Systems and the Indian River Lagoon- A Data Base Inventory and Analysis of Problem Areas". An evaluation matrix was created in order to rank each area identified using the same criteria. The

criteria chosen for evaluation were population density, soil type, groundwater level, potable water source, degree of surface water management, flood potential, surface water classification and proximity to surface water. Martin County is proceeding with a $75 million 10-year Capital Improvement Plan for the conversion of the prioritized area to central sewer systems in order to eliminate negative impacts to the Indian River Lagoon.

Martin County has worked with agricultural interests in a five-year effort to implement Best Management Practices (BMPs) for agricultural operations. These BMPs are production systems and management strategies that have been scientifically shown to minimize adverse impacts on of agricultural production to surface waters that drain to the Everglades and Indian River Lagoon.

2) What steps has the County taken or plans to take to reduce harmful runoff from urbanized areas to the lagoon?

RESPONSE: The OWQ is in the process of completing construction of six urban retrofit projects at a cost of $18.3 million, that include the Salerno Creek, Hibiscus Park, Poinciana Gardens Phase I, Golden Gate Phases I, II, III , Palm Lake Park, Tropic Vista and Old Palm City water quality retrofit projects. All of these basins previously drained untreated storm water runoff to the Indian River Lagoon.

At a cost of $8.1 million, the OWQ also is preparing to begin the construction of additional urban retrofit projects that include Little Club, Fern Creek, Coral Gardens, Kitching Creek, Manatee Creek and Rio.

The Martin County BCC has designated seven Community Redevelopment Areas (CRAs) within the county. These CRAs are the older urban core areas of the county that were developed prior to any regulatory water quality or water quantity requirements. The BCC has authorized staff to develop a Capital Improvement Plan (CIP) to retrofit these CRAs with water quality treatment and storm water attenuation facilities.

The Martin County BCC has also prioritized a twenty (20) year plan Capital Improvement Plan to retrofit older surface water basins with older neighborhoods that were generally developed prior to any required water quality treatment or storm water attenuation facilities.

3) What is the County doing to comply with section 402(p) of the Clean Water Act?

RESPONSE: Martin County is currently implementing Phase II Municipal Storm Sewer Service Systems (MS4) requirements for the National Pollution Discharge Elimination System (NPDES) requirements of the Federal Clean Water Act. The County has obtained the required permits and has spent approximately $1 million dollars in the current fiscal year to comply with the NPDES requirements. It is estimated that county costs to implement future compliance of the unfunded federally mandated NPDES requirements over the next 10 years would exceed $10 million.

Storm water and agricultural runoff is a local responsibility. Why should the federal government pay for what is essentially a local responsibility?

RESPONSE: Storm water and agricultural runoff is a local responsibility. Beginning in the 1970's, State agencies, including the South Florida Water Management District and the Florida Department of Environmental Protection, have taken the responsibility of requiring new developments to implement surface water attenuation and water quality requirements for new construction.

At the local level, Martin County has implemented surface water quality and attenuation regulations that are more stringent and comprehensive than the state or federal surface water permitting requirements.

The Comprehensive Everglades Restoration Project requires the federal government to assume responsibility to assist in correcting the problems that were created by the original construction of the Central and South Florida (C&SF) Project. The Indian River Lagoon-South project provides an excellent example of the unique Federal/State partnership that will effectively address problems created by the earlier misguided federal policy that caused negative catastrophic environmental impacts to the Indian River Lagoon.

4) What is Martin County doing to address encroaching urban development on lands needed for Everglades projects.

RESPONSE: Urban development is not allowed to occur on any lands designated within the Indian River Lagoon portion of the Comprehensive Everglades Restoration Plan. Martin County has developed through its Comprehensive Growth Management Plan (CGMP) primary and secondary

Urban Service Districts (USDs) that define the limits for urban development. All lands included within the boundary of the proposed Indian River Lagoon portion of the Comprehensive Everglades Restoration Plan are outside of the USDs and are unavailable for urban development.

The Martin County BCC has also directed staff to advertise for an ordinance that will place a three year one cent sales tax surcharge on the ballot for land conservation and is entitled Lands For You II. The Lands For You II ballot issue will be included on the general election ballot November 2, 2004. The purpose of this ordinance is to raise approximately $50 million for conservation lands, of which, at least 30% and up to 70% of the proceeds could be spent outside of the USDs, including CERP properties. As mentioned earlier, a similar initiative in 1998 raised $50 million for lands needed for environmental restoration and the majority of the funds were used to purchase of properties within the CERP defined boundaries.

I trust you will find this information useful in your review of this Comprehensive Everglades Restoration Plan project. Martin County greatly appreciates your interest, and if you have any further question please contact me at your earliest convenience.

Sincerely,

Doug Smith
Chairman
Martin County Board of County Commissioners

DS/gr/kap

cc: Martin County Board of County Commissioners
Martin County Administration
Martin County Office of Water Quality
Fowler West, The Washington Group

Miccosukee Tribe of Indians
of Florida

Business Council Members
Billy Cypress, Chairman

Jasper Nelson, Ass't Chairman
Max Billie, Treasurer

Andrew Bert Sr., Secretary
Jerry Cypress, Lawmaker

Written Testimony for the Record on behalf of
The Miccosukee Tribe of Indians of Florida
by Dionè Carroll, General Counsel

Presented to: Committee on Transportation and Infrastructure
United States House of Representatives

July 28, 2004

Concerns of the Miccosukee Tribe of Indians
Regarding the Water Resources Development Act of 2004
Proposed Authorization of the Federal Southern Golden Gate
Estates CERP Project ("SGGE Project")

The Miccosukee Tribe of Indians of Florida has lived in Florida since time immemorial. In 1997, the Tribe acquired formal title to approximately 805 acres of Indian land that is in the Federal Southern Golden Gate Estates Comprehensive Everglades Restoration Project footprint ("CERP"). The land, along with the surrounding Picayune Strand Area, was historically used by the Miccosukee and now, unfortunately, is the subject of a legal proceeding where the Florida Department of Environmental Protection ("DEP") is trying to take by force the Tribe's Indian land. As long as any member of the Tribe can remember, Indian people have been going into the area to find herbs for Tribal medicines and palm fronds and other materials for the construction of the frond-roofed, native dwellings, known as "chickees." Chickees continue to be the primary

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Constitution Approved by the Secretary of the Interior, January 11, 1962

dwellings for some Miccosukee people and secondary dwellings for most Miccosukee people.

Although most Tribal people occupy modern dwellings, this is certainly not true in all cases. Some members choose to live the old ways, and most Miccosukee people spend time in chickees, weekend in them, cook in them, and use them for storage and other practical and religious functions. To secure this unique habitat, which is an integral part of the Tribe's cultural and religious practices, formal title of these Indian lands was secured by the Tribe, who maintains the land in conservation to protect the land itself and its low-impact cultural uses.

This Indian land is particularly important for protection because it also includes an archeological site, which has been identified as a Native American prehistoric site used for camping, hunting and foraging activities. Additional archaeological surveying has been conducted and documented, and it is crucial and central to the Tribe's beliefs, customs and laws that this land, with its cultural resources, be protected. The Tribe is in the process of trying to transfer actual title to the U.S. Government to be held in trust for the Tribe. To date, that transfer is incomplete, and DEP is still pursuing the condemnation of Tribal land.

DEP previously attempted to buy the threatened land, but for reasons of law and native custom, the Constitution of the Miccosukee Tribe of Indians of Florida, Article V, sections 2 and 6,[1] the Non-Intercourse Act, 25 U.S.C. § 177 and implementing Federal Regulations, the Tribe did not sell this land to DEP. The land has cultural value, and the sovereignty of the Tribe has much greater value than money. DEP is now attempting to circumvent cultural and legal

[1] The Constitution provides, in part, that it is in the power of the Tribe's Business Council, "[a]s authorized by law, to manage, lease, permit or otherwise deal with tribal lands, interest in lands or other tribal assets; and to purchase or otherwise acquire lands or interests in lands within or without the reservation, provided tribal lands shall not be sold." Miccosukee Const., Art. V, section 6 (emphasis added).

principles through legal action, and it attempts to do so irresponsibly, by "quick take" which, ignores all principles of due process, comity and pre-emption.

As DEP made clear during the hearing before your Committee on July 22, 2004, DEP is acquiring the land in this area for purposes of implementing the SGGE project. Federal government blessing of strong-arm tactics, such as those employed by DEP, would violate in myriad ways the federal trust responsibility to Indian Tribes. The Miccosukee Tribe has a long and respected history as a good custodian of land. The Tribe has the strongest water quality standards in the State of Florida, and it has dedicated countless resources to Everglades and other natural resource protection. It is unthinkable that no workable solution, which recognizes and protects Tribal sovereignty, has been pursued by the government when the Tribe has vigorously pursued such solutions. Authorizing the SGGE project without protecting the Tribe and its lands, which are already held in conservation and surely could remain in Tribal control without preventing reasonable restoration, would be unconscionable.

The Tribe, therefore, requests that no action be taken to authorize the SGGE project without appropriate protection of Tribal lands. In addition to protection of Tribal sovereign rights, the Tribe is concerned that the project needs to be more completely and thoroughly analyzed before action is taken to go forward with the project.

The Miccosukee Tribe of Indians has concerns raised by the Army Corps of Engineers ("Corps") Draft Integrated Project Implementation Report and Environmental Impact Statement ("PIR/EIS") for the Southern Golden Gate Estates Ecosystem Restoration. The Tribe contends that the PIR/EIS and events leading up to the PIR/EIS may run afoul of the Water Resources Development Act of 2000 ("WRDA 2000") and WRDA predecessor statutes, the National

Environmental Policy Act (NEPA) and implementing regulations, the Administrative Procedures Act ("APA"), the Endangered Species Act ("ESA") and implementing regulations, the December 2003 Programmatic Regulations, the National Historic Preservation Act of 1966, Executive Order 12898 on Environmental Justice, Chapter 373, Florida Statutes, the Corps' trust responsibility to the Tribe and other legal responsibilities pertaining to environmental and archaeological resources. The Corps' Draft PIR/EIS is premature and incomplete as it purports to only tentatively select Alternative 3D, does not discuss in any meaningful way that the Tribe has hundreds of acres of lands in the project area. It, further, does not reflect the fact that the Corps' state and local partners (the South Florida Water Management District ("SFWMD") and the Department of Environmental Protection ("DEP")) have been condemning land and have already constructed components of the Project, even plowing in canals, as part of implementing a federal project without having completed the environmental reviews required under NEPA, the ESA, the Programmatic Regulations and Chapter 373, Florida Statutes. It even goes so far to suggest the project is being performed only with land which is purchased, when clearly land is being condemned as well, see PIR/EIS page 3-2, and showing favorites by allowing that selected lands are receiving flood protection, while others are taken.

The Draft PIR/EIS asks Congress to authorize giving and crediting the state partner with federal funds even though they have begun illegally implementing a federal project prior to complying with WRDA 2000 and prior to conducting the reviews required by NEPA, the ESA, the Corps own rules, including the Programmatic Regulations, and Chapter 373, Florida Statutes. The fact that the state has moved forward on the project before the reviews required by law are

completed must be thoroughly discussed in the PIR/EIS, which is required to be a full disclosure document.

Moreover, the Corps of Engineers has not fulfilled its responsibility to conduct government- to-government consultation with the Miccosukee Tribe and other federally recognized Tribes with an interest in this area on cultural resources. There are at least 13 sites located in the project area with another previously unrecorded site on Tribal lands. The Tribe has made application to the State Division of Historical Resources to include this site in the National Register of Historic Properties. Based on what the Tribe has found on its land, the entire area needs to have a Cultural Resources Survey conducted, which is recognized in the Draft PIR/EIS, prior to finalizing NEPA documentation, not after NEPA documentation. The State Historic Preservation Officer has concurred in the need for a Cultural Resources Survey due to the high probability of unrecorded sites within the project area. These surveys need to be completed, government-to-government consultation with the Tribes needs to be completed to the Tribes satisfaction, and mitigation acceptable to the Tribes must be accomplished. Indeed, two sites were identified as part of the Prairie Canal Early Start Project. They were not tested prior to the construction due to flooding. So, the historic value is unknown, and no consultation was done with the Tribes. A promise to do further testing on these sites is made in the Draft PIR/EIS. Testing of these sites could have been accomplished this spring during the dry season. There has been no contact with the Tribes about these two sites.

The Army Corps of Engineers owes the Miccosukee Tribe of Indians a sacred trust obligation and fiduciary duty to protect Tribal lands and access to lands, resources, and assets pursuant to the federal Indian Trust Doctrine developed over hundreds of years of jurisprudence.

If the United States fails to stop the State, the Corps' local partner, from illegally and unnecessarily seizing the Tribe's lands, justice fails and the trust obligations will have been violated. Moreover, the Department of the Interior, which furnished funds for land acquisition, is required explicitly under WRDA 2000 to abide by its trust responsibility during CERP implementation. Sadly, at present, the Draft PIR/EIS barely acknowledges that the Tribe has lands in the project area when it discusses *consulting* with the Tribe in Section 3.15 on Cultural Resources. Indeed, section 5.15 on Cultural Resources contains no mention of the Tribe.

Environmental laws should be followed. The failure to do so will result in hastily devised and harmful plans which violate people's rights and ignore laws designed to protect the environment. Trust obligations to the Tribe must be fulfilled. The Corps' legally insufficient PIR/EIS, and its turning a blind eye toward the state and regional actions on a federal project prior to complying with NEPA and the ESA, will not advance the goals of environmental restoration. Major steps must first be taken to assure appropriate restoration and protection of Tribal rights.

Sincerely yours,

Dionè Carroll

Dionè C. Carroll, Esq.
General Counsel

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